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01

Scale AVIATION Modeller International

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Telford 2005
IPMS Scale
Modelworld

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INSIDE**

BACK TO BASICS

aircraft

A COMPREHENSIVE GUIDE FOR THE MODELLER

PART FIVE



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INSIDE**

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Jerry Boucher

Albatros C.XII 1:72 Scale plans by
Wojciech Butrycz

**WIN
CORSAIR
1/32**



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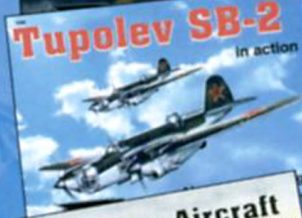
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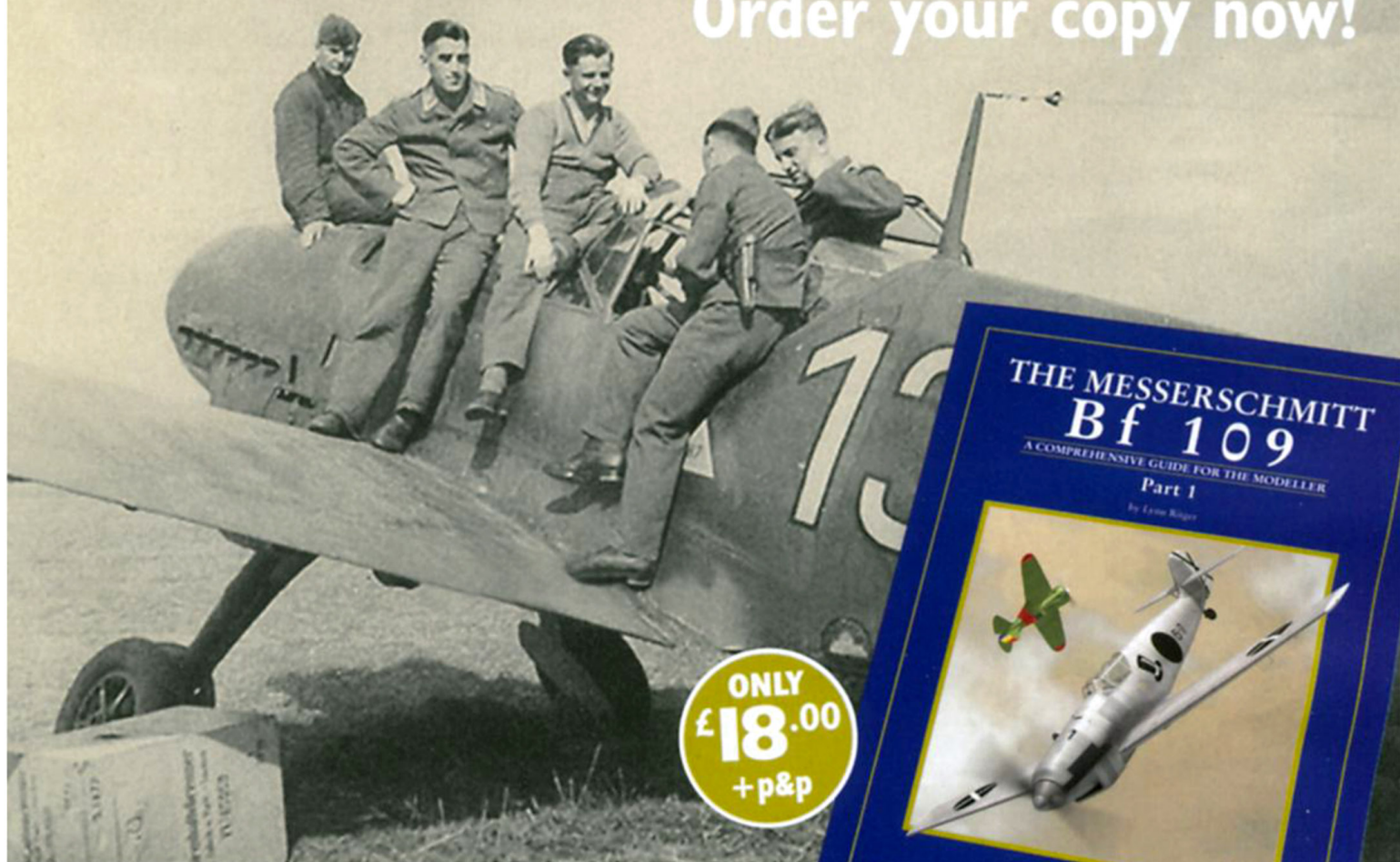
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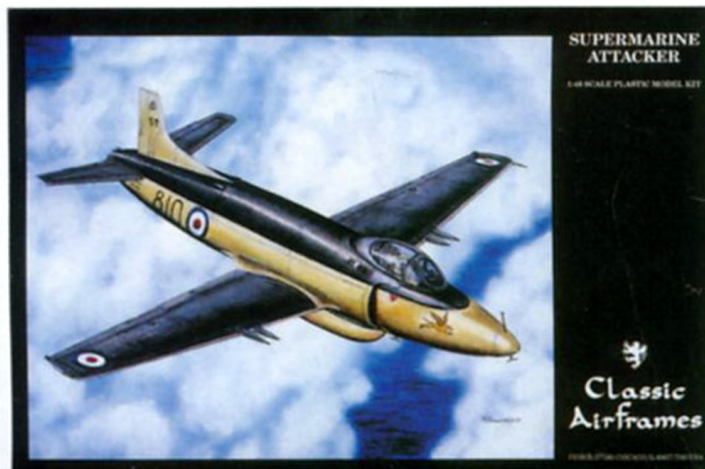
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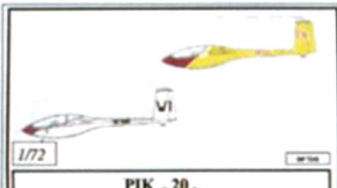
Scale: 1/48
Kit No: 4102
Price: £32.99
Panel Lines: Recessed
Status: New tooling
Type: Injection Moulded Plastic
Parts: Plastic 38, Resin 19, Clear 1, Etched 13
Decal Options: 3
Manufacturer: Classic Airframes
UK Importer: Hannants



Kaiser Ka 6/CR Rhonsegler

Scale: 1/72
Kit No: 7232
Price: £14.30
Panel Lines: Recessed
Status: New tooling
Type: Resin
Parts: Resin 9, Vacform Clear 2
Decal Options: 6
Manufacturer: Dujin
UK Importer: Hannants

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Pik 20

Scale: 1/72
Kit No: 7242
Price: £14.30
Panel Lines: Recessed
Status: New tooling
Type: Resin
Parts: Resin 11, Vacform Clear 2
Decal Options: 2
Manufacturer: Dujin
UK Importer: Hannants

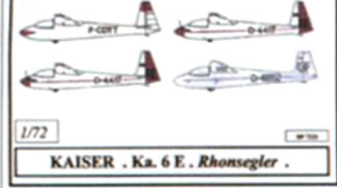
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Pik 16 Vasama

Scale: 1/72
Kit No: 7241 Price: £14.30
Panel Lines: Recessed
Status: New tooling
Type: Resin
Parts: Resin 12, Vacform Clear 2
Decal Options: 5
Manufacturer: Dujin
UK Importer: Hannants

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Kaiser Ka 6E Rhonsegler

Scale: 1/72
Kit No: 7233
Price: £14.30
Panel Lines: Recessed
Status: New tooling
Type: Resin
Parts: Resin 9, Vacform Clear 2
Decal Options: 4
Manufacturer: Dujin
UK Importer: Hannants

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I.V.L. K.I. Kurki

Scale: 1/72
Kit No: 72242
Price: £23.15
Panel Lines: Recessed
Status: New tooling
Type: Resin
Parts: Resin 24 + Acetate Sheet
Decal Options: N/A
Manufacturer: Dujin
UK Importer: Hannants



Focke Wulf / Lippisch Delta III.

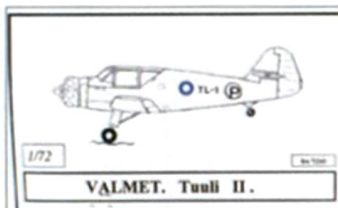
Scale: 1/72
Kit No: 72241
Price: £23.15
Panel Lines: Recessed
Status: New tooling
Type: Resin
Parts: Resin 27, Vacform Clear 4
Decal Options: 1
Manufacturer: Dujin
UK Importer: Hannants

D-DELTA D-DELTA



Fiat Cr. 32

Scale: 1/48
Kit No: 4106
Price: £29.99
Panel Lines: Recessed
Status: New tooling
Type: Injection Moulded Plastic
Parts: Plastic 38, Resin 28, Etched 25, Clear 1
Decal Options: 5
Manufacturer: Classic Airframes
UK Importer: Hannants



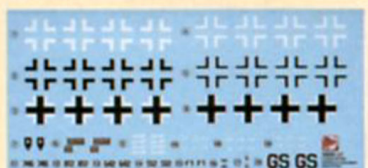
Valmet Tuuli II

Scale: 1/72
Kit No: 72243
Price: £23.15
Panel Lines: Recessed
Status: New tooling
Type: Resin
Parts: Resin 22, Vacform Clear 2
Decal Options: 1
Manufacturer: Dujin
UK Importer: Hannants



Arado Ar234P

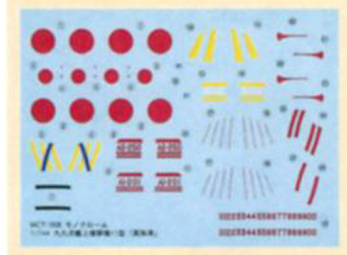
Scale: 1/72 Kit No: 5026
Price: £14.99 Panel Lines: Recessed
Status: New Tooling
Type: Injection Moulded Plastic
Parts: Plastic 65, Clear 6, Etched 6
Decal Options: 3
Manufacturer: Dragon
UK Importer: The Hobby Company





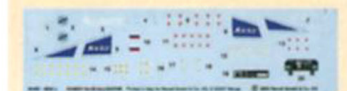
Aichi D3AI 'Val'

Scale: 1/144
Kit No: 008
Price: £7.00
Panel Lines: Recessed
Status: New tooling
Type: Injection Moulded Plastic
Parts: Plastic 54, Clear 2 (makes two complete kits)
Decal Options: 3
Manufacturer: Monochrome
UK Importer: Freightdog



Kamov Ka-52 Alligator

Scale: 1/72
Kit No: 04483
Price: TBA
Panel Lines: Recessed
Status: Revised Tooling
Type: Injection Moulded Plastic
Parts: Plastic 146, Clear 5
Decal Options: 1
Manufacturer: Revell



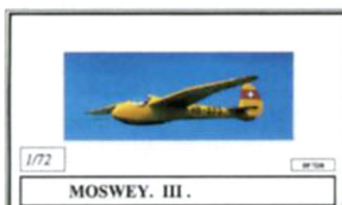
Short Belfast SC1

Scale: 1/72
Kit No: 8172
Price: £95.50
Panel Lines: Recessed
Status: New tooling
Type: Resin
Parts: Resin 7
Decal Options:
Manufacturer: Magna
For UK availability Contact Magna Models
on 01202 624314



OH-58D Combat Scout

Scale: 1/72
Kit No: 1185
Price: £4.25
Panel Lines: Recessed
Status: New Tooling
Type: Injection Moulded Plastic
Parts: Plastic 36, Clear 6
Decal Options: 1
Manufacturer: Italeri
UK Importer: The Hobby Company



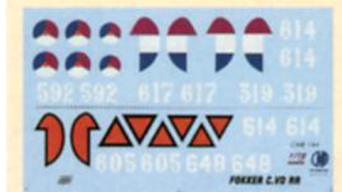
Moswey III

Scale: 1/72
Kit No: 7238
Price: £14.30
Panel Lines: Recessed
Status: New tooling
Type: Resin
Parts: Resin 8, Vacform Clear 2
Decal Options: 2
Manufacturer: Dujin
UK Importer: Hannants



Fokker C.VD RR

Scale: 1/72
Kit No: 144
Price: £22.30
Panel Lines: Recessed
Status: New tooling
Type: Resin
Parts: Resin 61, Vacform Clear 2
Decal Options: 5
Manufacturer: CMR
UK Importer: Hannants



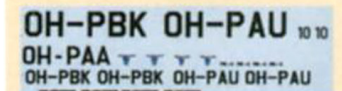
Antonov An-124 'Ruslan'

Scale: 1/144
Kit No: 04221
Price: £19.99
Panel Lines: Recessed
Status: New Tooling
Type: Injection Moulded Plastic
Parts: Plastic 91, Clear 3
Decal Options: 5
Manufacturer: Revell



Pik 5 Cumulus

Scale: 1/72
Kit No: 7240
Price: £13.60
Panel Lines: Recessed
Status: New tooling
Type: Resin
Parts: Resin 14, Vacform Clear 2
Decal Options: 3
Manufacturer: Dujin
UK Importer: Hannants



Sea Horse UH-34J

Scale: 1/72
Kit No: 1066
Price: £6.99
Panel Lines: Recessed
Status: Revised Tooling
Type: Injection Moulded Plastic
Parts: Plastic 50, Clear 7
Decal Options: 4
Manufacturer: Italeri
UK Importer: The Hobby Company



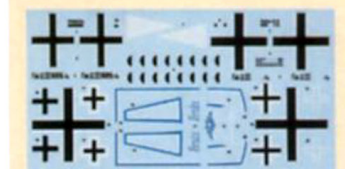
Tupolev Tu-22B Blinder

Scale: 1/72
Kit No: 04371
Price: £19.99
Panel Lines: Recessed
Status: Reissue
Type: Injection Moulded Plastic
Parts: Plastic 108, Clear 7
Decal Options: 4
Manufacturer: Revell



Fokker D.VI

Scale: 1/32
Kit No: 603
Price: £27.95
Panel Lines: Recessed
Status: New Tooling
Type: Injection Moulded Plastic
Parts: Plastic 86
Decal Options: 3
Manufacturer: Roden
UK Importer: Pocketbond



Heinkel He 51B-1



Heinkel He 51B-1

Scale: 1/72
Kit No: 72191
Price: TBA
Panel Lines: Recessed
Status: New Tooling
Type: Injection Moulded Plastic
Parts: Plastic 44
Decal Options: 3
Manufacturer: ICM
UK Importer: Hannants



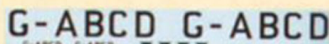
V-1s with launch Site

Scale: 1/72
Price: £53.55
Panel Lines: Recessed
Status: New Tooling
Type: Injection Moulded Plastic
Parts: Plastic 162
Decal Options: N/A
Manufacturer: Mach 2
UK Importer: Hannants



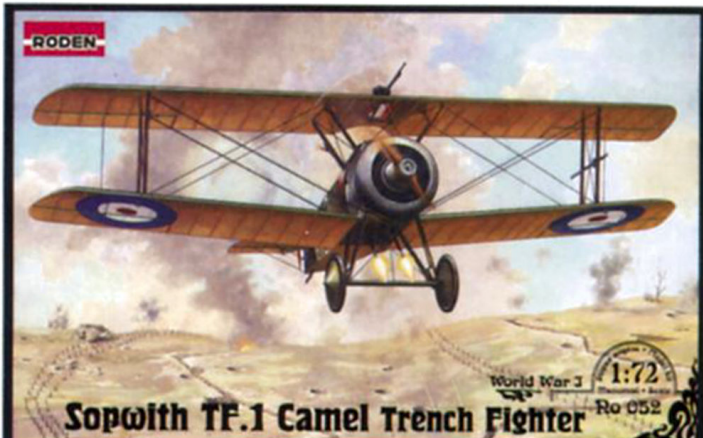
Avro Type 594 Avian Mk. IV

Scale: 1/72
Kit No 72238
Price: £23.15
Panel Lines: Recessed
Status: New tooling
Type: Resin
Parts: Resin 22, Vacform Clear 4
Decal Options: 1
Manufacturer: Dujin
UK Importer: Hannants



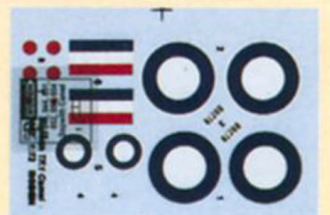
Westland Wapiti IIA 'in RAF Service'

Scale: 1/72
Kit No 139
Price: £24.99
Panel Lines: Recessed
Status: New tooling
Type: Resin
Parts: Resin 124, Vacform Clear 2
Decal Options: 5
Manufacturer: CMR
UK Importer: Hannants



Sopwith TF.1 Camel Trench Fighter

Scale: 1/72
Kit No: 052
Price: £6.95
Panel Lines: Recessed
Status: Revised tooling
Type: Injection Moulded Plastic
Parts: Plastic 51
Decal Options: 1
Manufacturer: Roden
UK Importer: Pocketbond



Felixstowe F.2A (late)

Scale: 1/72
Kit No: 047
Price: £17.95
Panel Lines: Recessed
Status: Revised Tooling
Type: Injection Moulded Plastic
Parts: Plastic 166, Clear 2
Decal Options: 1
Manufacturer: Roden
UK Importer: Pocketbond



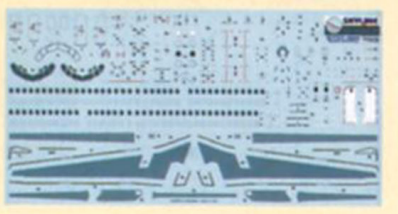
Hughes IB Racer

Scale: 1/72
Kit No 148
Price: £24.99
Panel Lines: Recessed
Status: New tooling
Type: Resin
Parts: Resin 35, Vacform Clear 4
Decal Options: 2
Manufacturer: CMR
UK Importer: Hannants



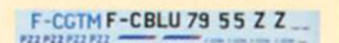
Boeing 737-300

Scale: 1/144 Kit No: 144-03A
Price: TBA
Panel Lines: Recessed
Status: New tooling
Type: Injection Moulded Plastic
Parts: Plastic 54
Decal Options: 1 (Stencils and windows, but no individual markings)
Manufacturer: Daco/Skyline
UK Importer: Hannants



Centrair C.201 Marianne

Scale: 1/72
Kit No 7239
Price: £15.20
Panel Lines: Recessed
Status: New tooling
Type: Resin
Parts: Resin 10, Vacform Clear 2
Decal Options: 3
Manufacturer: Dujin
UK Importer: Hannants



Valmet Tuuli III

Scale: 1/72
Kit No 72244
Price: £23.15
Panel Lines: Recessed
Status: New tooling
Type: Resin
Parts: Resin 28, Vacform Clear 2
Decal Options: 1
Manufacturer: Dujin
UK Importer: Hannants



Finland's Winter Warrior

John Stokes models Classic Airframes' 1/48 scale Polikarpov I-152



I knew very little about this aircraft when I received the kit, although it had a familiar look about it. That familiarity comes, of course, from its later derivative, the monoplane I-16 Rata which had a similar short tubby fuselage with a big blunt radial engine up front.

The I-152 looks like it would have been a very 'handy' machine, with its big upper wing and small lower wings in sesquiplane format, short-coupled fuselage, and big fin and rudder. That big, flat engine front doesn't look too aerodynamic though.

Well, it was time to delve into various references and see what this little aircraft was all about. Designed by the prolific Nikolai Nikolayevich Polikarpov in 1933, and making its first flight in October of that year, the I-15 proved to be highly manoeuvrable and a good gun platform. Its most noticeable feature was the way the upper wing was 'gulled' into the top of the fuselage, just ahead of the cockpit canopy. It was successfully used in combat by the Chinese against the Japanese, and also by the Republicans in the Spanish Civil War. An improved version was developed with a more powerful engine in a longer chord cowl, and a conventional straight upper wing without the characteristic 'gull' section to it. This version was designated the I-15 Bis

(Bis meaning literally 'again') and later known as the I-152, and is the subject of Classic Airframes kit.

Again it served with the Chinese and was supplied to the Spanish Republicans just before the end of the Civil War, and also in large numbers with the VVS (Soviet Air Force). Over 1,000 were in VVS service at the time of the German invasion in 1941, mostly in ground attack and close support roles, to be eventually replaced by the Ilyushin Il-2 Sturmovik. It had also been used by the VVS in the earlier 1939-40 Winter War against Finland, but more on this later. Some 2,408 I-152s had been built by the time production finished in 1939. Shame on me for having been almost totally ignorant of this charismatic little biplane!

The Kit

Packed in Classic Airframes' usual lift-top box, the main mouldings come on two frames (Photo 1) in a neutral light grey shade of plastic. The first thing that struck me was how nicely done were the fabric-covered sections of the fuselage. In a subtle way they actually look like they are tightly doped over a frame, rather than the heavy handed 'saggy' appearance a lot of manufacturers go for. There are no alignment pins and sockets on any of the parts,

as you would expect from a limited-run model, and no flash was to be seen at all.

The finer detailed cockpit parts are supplied in resin, as are the optional skis. There are two sets of two types of windscreen supplied on a small vacformed sheet, and a photo-etched fret containing the shutter mechanism that fits on the front of the cowl (Photo 2). The package is rounded off with a pair of A5 sheets of colour options, two Russian and two Finnish aircraft being illustrated. Both the Russian and one of the Finnish options are in olive green over light blue, the other Finnish machine having black and olive green upper surfaces with yellow bands and lower wingtips. The decal sheet is by Microscale, so quality is assured, and as a bonus it contains all the serials necessary to model any of the Finnish I-152s at any point in their careers (Photo 3). Within the supplied schemes further variations are possible as spatted and unspatted wheeled undercarriages are supplied, as are the aforementioned resin skis, plus a spinner for the propeller. Notes are provided to guide you as to which parts you will need for this very complete package of options. The fun part is in choosing which of all these options you are going to go for!



1/48th Scale

Manufactured by

Classic Airframes



Fuselage

I am always suspicious of resin cockpits, as once assembled they often turn out to be too wide to fit inside the fuselage. With this in mind I removed all the resin parts from their casting blocks and temporarily assembled the main cockpit parts with masking tape. Placing it in the fuselage and bringing both halves together (Photo 4) confirmed the inevitable, as there was a large gap running all around the top and bottom that would have to be dealt with.

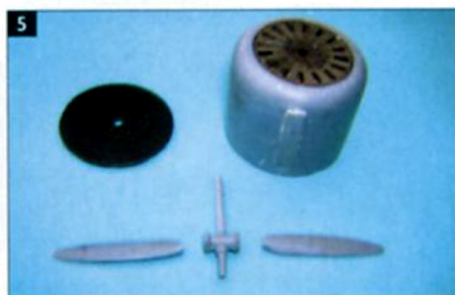
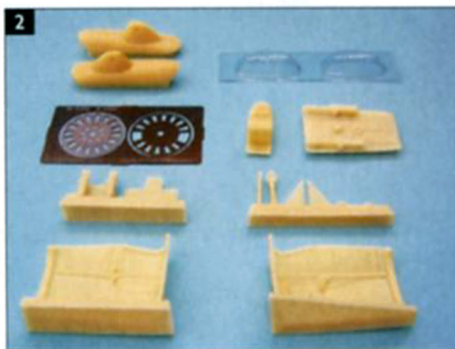
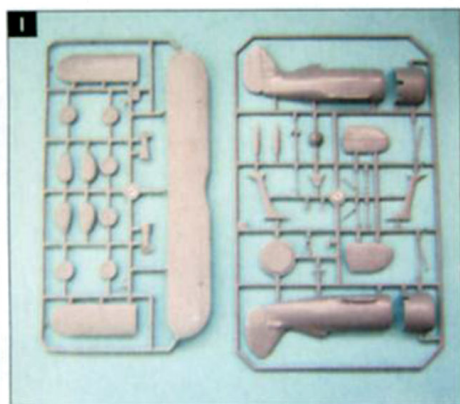
In the meantime I assembled the cowling and three-part propeller. The two halves of the cowling were stuck together, as were the two photo-etched parts of the front shutter. The shutter was then eased into the front of the cowling (where it was an excellent fit), and the cowling placed front down on my cutting mat. Taking a cocktail stick, cyanoacrylate was run around the inside of the cowling where the two parts met, securing the shutter in place. It's a nice simple way to get the shutter absolutely flush-fitted to the front of the cowl, and no messy glue marks (Photo 5). Because the photo-etched shutter is so thin I didn't think it would support a propeller shaft, so I cut a 20-thou plasticard disc with a hole in the centre to fit in the cowl about 1 cm back from it, which the shaft would

also go through. As you will have guessed, there is no engine detail at all provided in the kit, and with that big shutter there is no real need for any. So if you want to open any panels up, it will be necessary to look to aftermarket suppliers.

Back with the fuselage itself, it was time to get out a curved blade and start scraping and thinning the insides of both fuselage halves (Photo 6). It was mainly the area around the cockpit opening that needed most thinning, particularly on the headrest. The resin cockpit sides also needed thinning, and this had to be done very carefully to avoid damaging the detail. For this I use a piece of Aeroclub's Tee-Al with wet 'n' dry paper stuck on with double-sided tape. This gave fine and accurate control of how much sanding down you do. Constant cross-checking between the resin parts and the fuselage halves was necessary to ensure that everything was going to fit, and also to indicate where to concentrate my efforts, and when to stop. Once I was satisfied that everything was OK, the question was whether to follow the kit instructions and assemble the entire cockpit unit, to be placed in the fuselage. I figured that this ran the risk of not getting both resin sides lined up with the openings on the plastic sides, and so decided first to secure each resin

piece to its respective fuselage half (Photo 8). The floor could then be attached to one side, and any mismatch would be inside on a bottom corner of the floor where no one was ever going to be able to see it. Whilst this was setting, I had noticed the complete absence of any blast tubes in the cowling for the guns. Looking at various photos it was apparent that there were two very prominent tubes in the top section, so it was out with the mini drills and a couple of holes made in the correct places. Short sections of Plastruct tubing were cemented in and then cut and sanded back to form two blast tubes of equal length and appearance (Photo 9). There are actually four gun butts in the resin cockpit, two above the instrument panel firing out through the aforementioned tubes at the top of the cowl, and two more on the floor either side of the rudder pedals (Photo 10). I could find no evidence of how these lower two guns fired out through the front of the aircraft, as I could not see any corresponding blast tubes on any of my (admittedly limited) photographic references. I therefore decided to leave well alone, as they will hardly be visible on the finished model.

The cockpit floor and seat unit were then attached to the right hand fuselage sidewall (Photo



11), and the two fuselage halves temporarily taped together while I adjusted it with tweezers from the hole in the front. Once satisfied all was well, the two halves were glued, clamped, taped up (Photo 12) and left overnight to dry.

The front firewall/bulkhead (Part A5) attaches to the front of the fuselage, and the cowling unit slides over it. The only problem being that it is way too big to allow this to happen. I had to repeatedly cut, sand and trim it until its diameter was reduced enough for the cowling to fit over (Photo 13).

Wings and tail

The lower wings and tailplanes are simple butt joints with the fuselage itself. Each part is a single moulding, and again the fabric detail is very nicely done. They fitted very well against their respective mating surfaces, and as they are all quite small I didn't see any need for reinforcing tabs or bits of wire in them. I simply brushed each mating surface with Mek-Pak liquid cement and pressed them together. Note that the lower wing has some dihedral as shown in the instructions, which I set up by placing a cocktail stick under each wingtip while it set. Everything went very well, and only a tiny amount of filler was used to blend things in (Photo 14).

Undercarriage

As mentioned in the introduction this release of the kit comes with resin ski units, and although they are optional for any of the versions offered, it would have been a shame not to use them (apart from which, I don't have any ski-equipped aircraft in my collection). However, to use them you have to modify the standard kit parts for the spatted undercarriage legs, as you also have to do for the unsponsored wheeled version. The instructions show where to cut the legs (Parts B4

and B5), and then butt join some very thin 'axle' parts to them. In reality this is going to give such a tiny contact area that a very weak joint will result, and I felt it was a non-starter. So, out with the good old brass wire again, and a simple bend using the plastic part to copy the angle, and I had stronger parts to use (Photo 15). Note that the brass part was longer than the plastic one so that it could fit into a hole drilled in the bottom of the plastic leg where the cut was made, and thus made a very strong joint. The leg on the left of the photo has been cut and the brass section inserted. Below it is the removed section which would otherwise fit against the wheel spat. The leg on the right is uncut, and has a sample of the brass and plastic sections below it.

Once made up, the legs were again a butt join to the fuselage. It was essential to slip the cowling on as there are cut outs in it where it fits over them. Once again Mek-Pak was used here. I have found that all Classic Airframes kits I have made use a particularly nice type of plastic that reacts well to liquid cements and always gives a nice strong joint. It is a pleasure to work with and so much better than some of the waxy and brittle stuff encountered from other manufacturers.

Once the legs were set I found that the cowling needed a little more fettling to get it sit centrally; maybe my sanding down of the firewall had taken a little too much off. Anyway, it was soon rectified with a couple of tiny scrap blocks of plasticard affixed on top to get everything to line up (Photo 16), and the cowling was permanently fixed in position. The chosen canopy was separated from the tiny vacform sheet, and a 1 mm hole drilled in it to accept the gunsight. Once the fuselage had been varnished, the canopy and sight were attached with Microscale Kristal Klear.

Struts

Here was something of a conundrum as to how I was going to go about fixing everything together. The cabane struts on the fuselage really needed to go on before painting, as trying to do them afterwards would almost certainly mess up the paintwork. There are actually four separate pieces, two inverted 'V's and two single 'I's. I discovered that the instructions had mixed up the 'V' struts A19 and A20, so I just swapped them over. There are faint marks on the fuselage indicating where they go, (note that the 'I' struts fit on the cowling but in reality they passed through it), and I cemented each one in place. Before they set I flipped the model over and aligned the tops of the struts with the corresponding marks on the lower surface of the upper wing. A bit of double checking from head-on was necessary to make sure each side was equal, but nothing too difficult.

The outer struts are big single-piece mouldings that have a considerable 'lean' on them. Once the cabane struts had fully hardened, they were fixed to the lower wing, and the same process followed of aligning them with their marks on the lower surface of the upper wing. This gave a neat unit ready for painting which received a coat of Halfords aerosol spray acrylic plastic primer (Photo 17) once the struts had been left overnight to dry.

Painting

Of the Russian and Finnish options offered in the kit, three are in dark green over pale blue and the fourth is in olive green and black over pale blue with yellow trim. It was this latter scheme that I thought was the most interesting and attractive, although on the instructions it is shown with the unsponsored wheeled undercarriage. A little research was called for here, out of interest as much as to try and decide

Polikarpov I-152



I-152, unit unknown, Autumn 1941. The aircraft wears a scheme of All Green, oversprayed with large areas of All Black. The edges of the areas are marked out with a harder definition. The aircraft carries four RO132 rocket rails, upon which are mounted RS-82 rockets

I-152, flown as a target tug by LeLv34, Finnish Air Force. Utti, July 1943. The aircraft carries a standard three-tone FAF camouflage scheme



I-152, unit unknown, operating somewhere near Leningrad in the Winter of 1941-42. The standard overall AEh-15/All Blue scheme has been overpainted with MK-7 white distemper. The aircraft is also fitted with skis and four bomb racks

I-152, unit unknown, Kiev area 1940. The aircraft wears a standard AEh-15 over All Blue scheme, with an early type of fuselage star that has a thin black outline and circle at its centre. The smaller star on the vertical stabiliser was also common during this period



I-152, flown by LeLv26, Finnish Air Force, 1940. This aircraft was originally captured in December of 1939

Polikarpov I-152

I-152, in service with the Chinese Nationalist Air Force, 1938. This aircraft was painted in overall grey-green, with national markings on the wing uppers and lowers, and rudder



I-152, flown by Senior Lieutenant V.F. Abramov, 11th Fighter Aviation Regiment, 1942. This aircraft is fitted with RS-82 rockets and a tailwheel



I-152 of an unknown unit, somewhere on the Finnish front. The fuselage bears the inscription 'За Сталина!' ('For Stalin!')

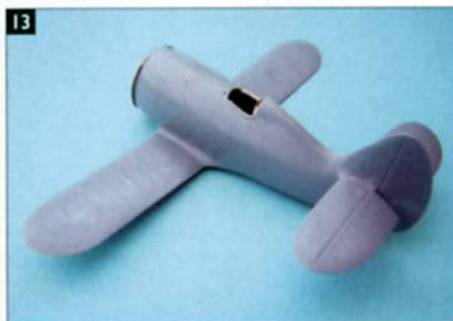
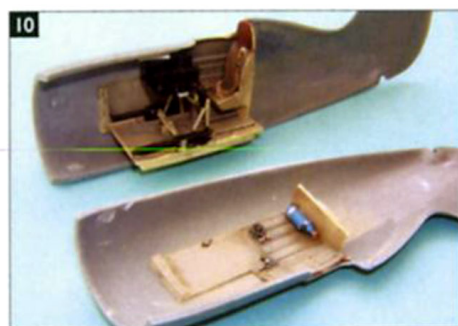
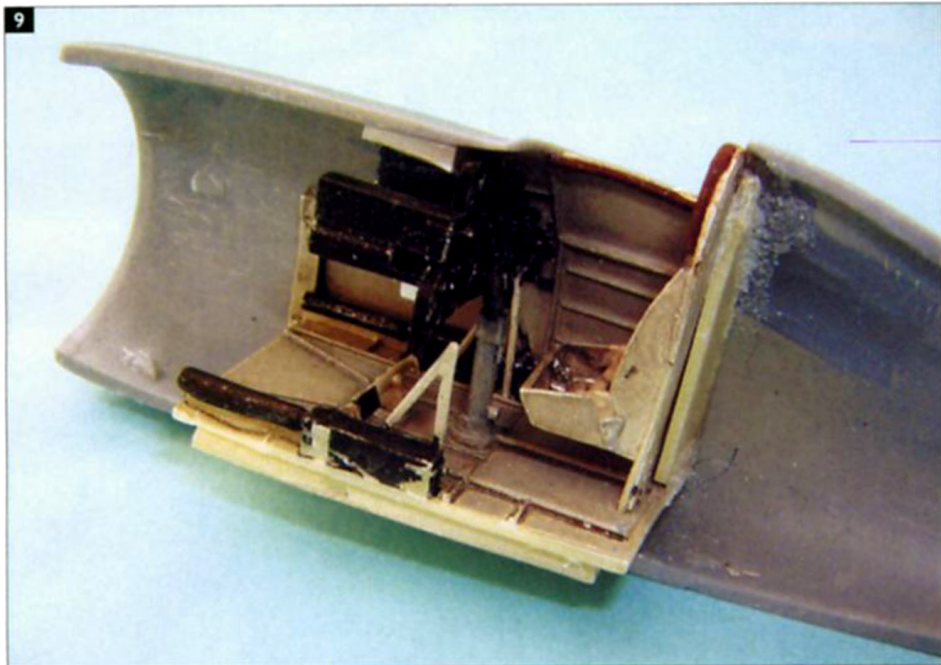


I-152 'Superchato', operated by the Spanish Republican Air Force during the closing stages of the Spanish Civil War

I-152, operated by the Ejercito Del Aire after the end of the Spanish Civil War. Such aircraft were used in a training role and lacked an optical gunsight. Note also the trim tab on the upper wing aileron and repositioned wingtip lights



Credits and references:
 • Many thanks to Erik Pilawski for his assistance.
 • 'Soviet Air Force Fighter Colours, 1941-45' by Erik Pilawski (available from www.sanairpublishing.com)
 • 'Modelling The Aircraft of the VVS' <http://vvs.hobbyvista.com/index.php>



what would make an accurate model. The Finns fought the Russians in two successive wars. The first was fairly short from 30 November 1939 to 3 March 1940, and is known as the 'Winter War'. During this time the Finns captured five airworthy I-152s from the Russians, which were still in service by the time of the 'Continuation War' from 1941-1944. During this second war the I-152s were relegated to the training role, and at least two of them remained in service until 1945. It therefore seems to be a reasonable assumption that it would be accurate to make a model in the Continuation War scheme fitted with skis.

By turning to the Internet I found a very useful site which detailed the history of all five of the Finnish I-152s, at http://surfcity.kund.dalnet.se/polikarpov_finland.htm. The site is run by Hakan Gustavsson, and was a great reference for this project. Hakan certainly sorts out the serial numbers of each aircraft, there being twelve possibilities among the five machines at various times! Using this information I settled on IH-5 which was allocated to T-Llv 35 as a trainer on 3 December 1941, and placed in storage on 11 September 1942. Use through the winter of 1941/42 must surely have seen it wearing the skis at some point. According to the website IH-4 and IH-5 made the last flights of I-152s in Finnish service on 12 March 1945. Classic Airframes provide all the Finnish serial combinations, so you can choose to model any of the machines at any time.

On painting. I then had to find out the correct colours to use on the model. I am not one of those people who believe that there is only one shade that can ever be considered accurate. I believe that a certain tolerance is necessary to allow for variation in paint batches, lighting conditions, wear-and-tear in service, and not least the effect of scale distance

when viewing a model. That said, I do not suggest that any old colour will do, but you should keep an open mind about what might be possible to use.

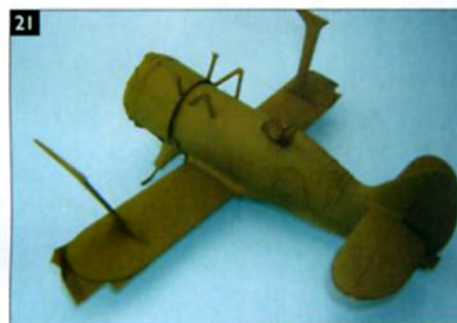
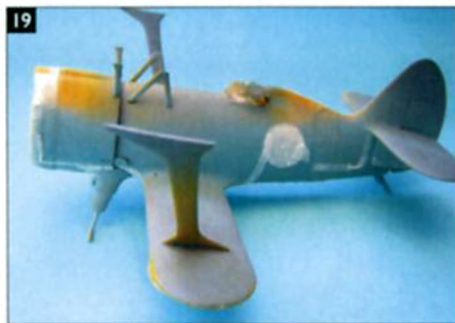
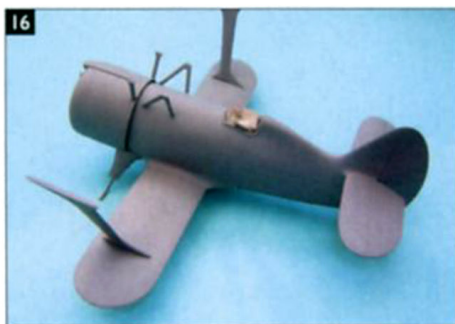
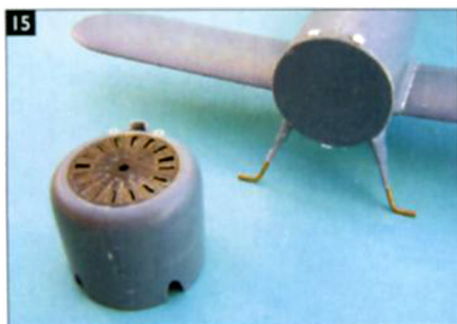
To start, the yellow areas on the fuselage and under the wingtips were airbrushed (Photo 18). Yellow is one of those colours for which it is essential to have a light undercoat to achieve a uniform finish, which is why I normally spray it first. Generally I try to airbrush starting with the lightest colours and finishing with the darkest colour.

I then set about looking for a suitable colour to use for the underside blue/grey, quoted in the instructions as being FS35414. Looking at my Luftwaffe colours, RLM 76 seemed to be a good match. I have jars/tins from Aeromaster, Lifecolour, Testors, and Xtracolor for this colour, and all of them are different shades! The old Aeromaster jar looked to me to give the desired shade, so this was airbrushed over the entire model once the yellow areas had been masked off (Photo 19) and left overnight to dry. The RLM 76 itself was then masked off in preparation for the upper surface colours. Looking at the instructions for my chosen colour scheme, the upper surface green seemed to curve around the fuselage roundel. As this is a white decal I took care to mask around where the decal would go (Photo 20) so that the area underneath it would all be RLM 76 without any of the upper surface green/black cutting through. I was concerned in case the white base decal of the roundel was thin enough to allow any colours to bleed through. The rest of the underside was then masked (Photo 21) to avoid any problems with overspray. I then went through the process of trying to figure out what to use for the upper surface 'olive green', stated on the instructions to be FS34102. A good look through the Humbrol rack in my local model shop convinced me that No 226 was the one to use, so this was airbrushed over

the entire upper surfaces (Photo 22). The final colour to go on was black, and even here I can find a way to be different! It always seems to me that colours like black and white straight out of the tin can be too harsh on a scale model. Taking a tip from the Internet again, this time <http://www.hyperscale.com>, Brett Green states that he uses a 50/50 mix of Tamiya black XF-1 and red brown XF-64 to create a 'scale black'. I had previously tried this on a night fighting Beaufighter and was very pleased with it. It creates a colour that looks exactly like black, but has a softer 'edge' which you can weather with neat black and obtain a subtle contrast. I had mixed a batch up in an empty Tamiya paint jar and still had most of it left. Given my inability to produce really fine freehand feathered edges with my airbrush, I opted for Blu-Tack 'sausages' and masking tape to define the areas to be sprayed with the 'scale black' (Photo 23). Spraying along the edge of the Blu-Tack from almost directly above gives a lovely fine feathered edge that is worth the effort involved with masking it all up. Once it was all dry came one of my favourite stages — peeling all the masking off to reveal the colour scheme (Photo 24). The skis I did in olive green without any black shading on them, and I knew that I would be respraying the top of the upper wing after rigging.

Decals

The area I masked off for the fuselage roundels worked well, as once the base decal was on it was a uniformly coloured white circle without any of the green showing through (Photo 26). This was definitely a wise move, as I had forgotten to do the same thing on the underside of the lower wing where the yellow and pale blue meet. A roundel goes here, and as I suspected the decal was translucent enough to let the underlying colours bleed through



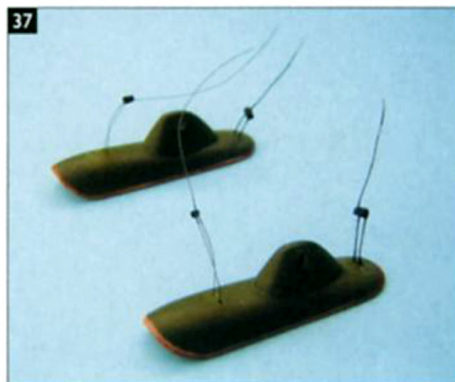
(Photo 27). Oh well, at least I thought of it in time to get the fuselage right. There are not many more decals to place; each white roundel base has a separate pale blue swastika to place on, and the fuselage serial needs to be made up (by the way, the swastika in this context has nothing to do with the Nazis — it was an ancient symbol of good luck). I did not put the roundels on the upper wing until rigging and patching of the paint finish had been completed. The decals went on well without any silvering, were beautifully thin, and settled down to give a 'painted on' look. The basic airframe was now looking good, but minus the top wing (Photo 28) and skis at this stage. Everything except the upper surface of the top wing was varnished with Humbrol satin, as it would be difficult to get at once the wing was in place and the rigging completed.

Rigging

I have tried two types of rigging, using stretched sprue or 'invisible thread'. Each has its advantages and disadvantages, but overall I think that invisible thread just has the edge in final appearance. In order to use either method you need to study a rigging diagram, work out where each line needs to go, and drill anchor points at each location. The main difference with invisible thread is that you need to drill right through the plastic at one end of the anchor points to be able to tension and secure it.

Before painting I had pre-drilled all the relevant places for the rigging lines with an 0.3 mm mini drill. As one end needs to be drilled right through I would normally try and do this on the bottom of the model where any paint patching would be less obvious. However, with lines going into the cowl, wing root and top of the fuselage, most of them were going to have to be pulled through the upper wing, so I decided to do them all here. It makes the

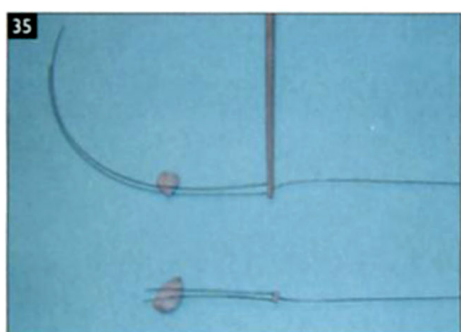
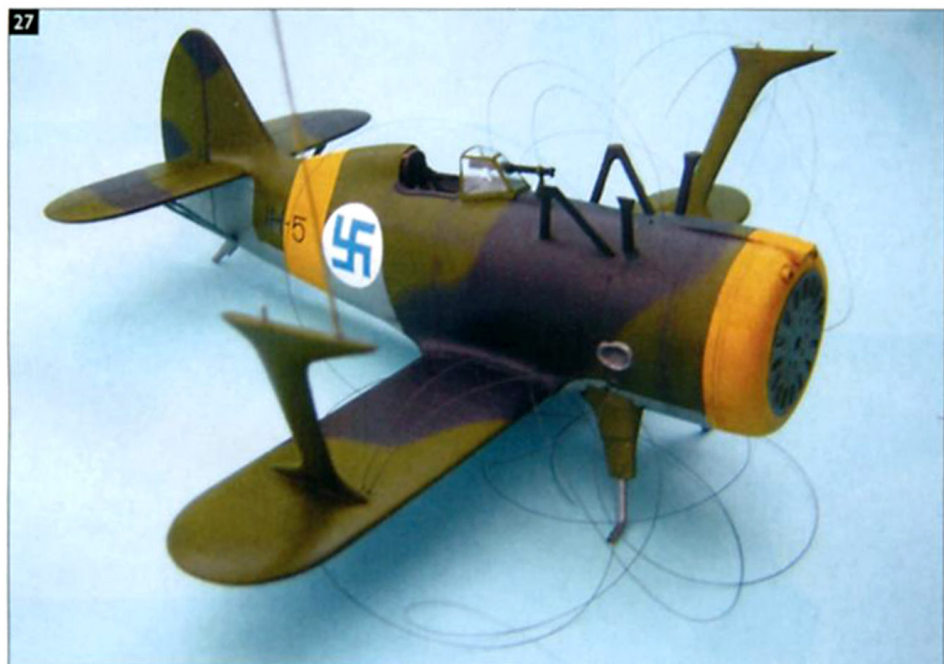
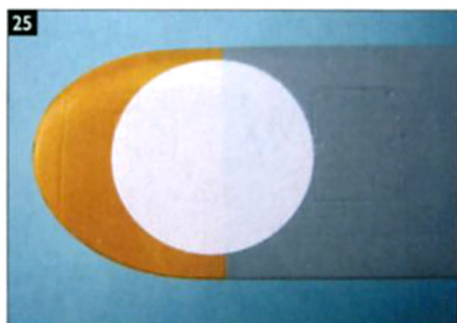
job easier if you secure one end of each individual line before fitting the top wing (Photo 29). I put a small blob of cyanoacrylate on a piece of the paper that comes with double-sided tape (the glue doesn't set on this, and remains usable for several hours), and dipped the end of line in it. The line was then gently pushed into its hole, where it quickly secured itself. All the lines were done, but I then had second thoughts about how I was going to secure the upper wing. It looked as if it would fit OK, but I was a little concerned that it might slide around and smear glue on the undersurface of the wing while I tried to position it. At this late stage I decided to use my old favourite method of a few brass wire 'pegs' to help locate the top wing on to the main interplane struts. Using a 0.5 mm drill and 0.5 mm brass wire, a couple of holes were drilled about 3 mm into the top of each strut. The tip of a length of wire was then dipped in cyano and pushed into one of the holes. After a few minutes I cut it off to leave a small 'peg' (Photo 30), which was a far easier way than making small pegs from wire and then trying to glue them in the holes. The top wing was then offered up

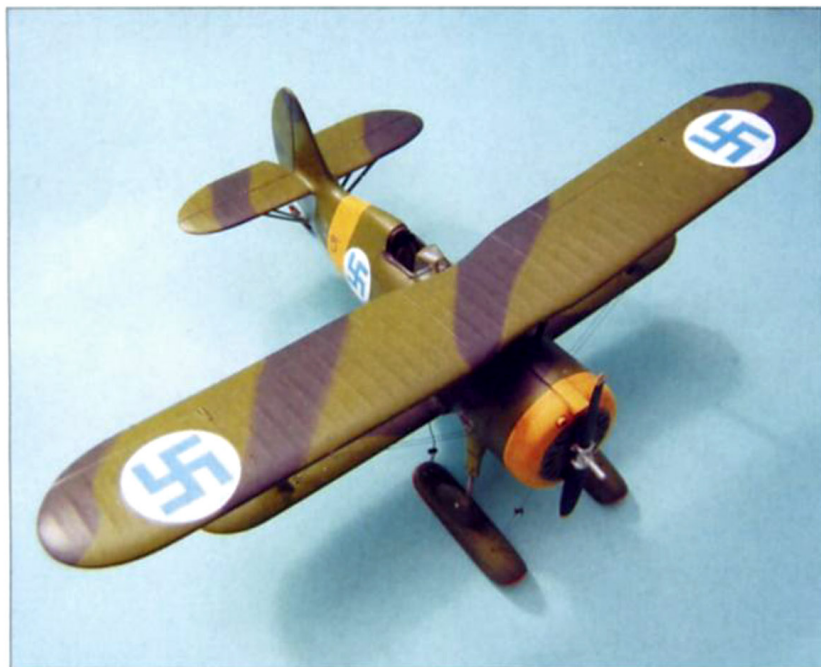


to the struts and the position of the pegs marked on it for drilling out at all four locations. The top wing could then be fitted without the risk of it sliding around. To minimise mess I used a cocktail stick to put a drop of cyano into each hole on the underside of the top wing rather than on the struts' 'pegs'. A small drop was also put on the top of each cabane strut, and the wing popped on very neatly and securely with no drama or fuss, although I took care not to trap any of the pre-fixed rigging threads that were floating around.

Leaving a couple of hours for the cyano holding the top wing to set, it was then possible to feed each thread through its hole. Having made each thread three or four times longer than it needed to be, there was plenty of excess to pull through. I then attached a peg to the line to make it taut and with a pair of tweezers on the inside of the rigging line pulled it back through about 1 cm and put a small blob of cyano on it. The peg on the other end pulled it back taut and took the blob of cyano into the hole with it as it went. It's probably easier to do than to describe! Very soon I had all four wingroot-to-upper outer strut lines secured (Photo 31), and after giving them 10 minutes or so to set, moved on to pull through and finish the rest of the rigging wires, some of which are doubled.

There was a slight gap on the outer side of the interplane struts where they met the top wing, which was easily filled with a bit of white glue mixed 50/50 with water (Photo 32). It flowed into the gap off a cocktail stick, and any excess was wiped off with a damp cloth. The model now looked rather hairy, with tufts of thread sticking out all over the top wing. Using a new scalpel blade these were carefully sliced off flush with the surrounding surface (Photo 33). No matter how careful you have been here, this will leave a noticeable mark. These little 'pits' can be





filled with a tiny amount of Milliput applied with the tip of an old blade, and smoothed down immediately with a wet finger (Photo 34). It's then a case of getting the airbrush out again and carefully touching-up and blending in the patched areas (Photo 35). Now it should be apparent why I had left off the roundels on the top wing. They fit right over where some of the rigging wires had been pulled through, and leaving them to last both protected them and made use of them to help cover the patching (Photo 36). The top of the wing received its varnish coat once the decals had thoroughly dried.

Skis

These have bungee cords at their front and back ends, designed to hold them in a level attitude in flight. There are no drawings in the instructions to reveal any detail, but the box art is fairly useful. The front bungee system needs to look as if under tension, whilst the rear ones must have a realistic sag. Looking at the box art, the lines are doubled along most of their length, but single where they are anchored to the main airframe. I decided that the best way to represent this was to use a section of sprue with three holes drilled as close as possible to each other. The outer two holes were used to secure

parallel sections of invisible thread, whilst the middle one took a section of thread going the other way.

Photo 37 shows on top the length of sprue drilled with the threads fixed, whilst underneath is the same thing after cutting from the sprue. Another pair was made up for the rear of the skis, but I used fine fuse wire instead of invisible thread as I wanted to be able to bend in a realistic sag. They were slightly thicker, but the difference was not too noticeable. They were all then fixed with cyano into pre-drilled holes in the resin skis (Photo 38) and left to harden off. The skis were then slipped on to the undercarriage legs, and the free ends of the threads pushed into pre-drilled holes in the cowling with a drop of cyano on them. With a bit of fiddling I got the front lines to tighten when the skis were at the right angle, but looking back I would have made the job much easier by not having glued the centre thread into the sprue block until this stage. The rear lines were then bent between fingers to take on an appropriate sag, and the little ski fitted to the tailskid.

Conclusion

Although fairly simple this little model was a pleasure to build. Classic Airframes have given us a number of kits that many of us have been waiting years for, and doing a pretty good job of it. You have

to be ready to do a bit of extra work, particularly in preparing the resin parts, but then this is a limited-run kit so that should come as no surprise. The fit of all the plastic parts was mostly excellent (apart from the oversized firewall), and I think that the surface detail is superb. In fact I will stick my neck out and say that the representation of the fabric areas is among the best I have seen anywhere.

There was an extra dimension to this build, and that was the research that it inspired. I had known very little about the Finnish wars and the aircraft they used, and also very little about Soviet-built aircraft of this period. Both are fascinating subjects and I will certainly continue to find out more about them. This little biplane (actually, against other models it is surprisingly big) is loaded with character and has started off a new thread of interest for me. Classic Airframes kits are not always easy to find as they seem to sell out quickly, but I would thoroughly recommend this one.

John Stokes

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Albatros C.XII in Poland

Wojciech Butrycz builds the 1/72 AIRMO/Jadar kit of this WWI reconnaissance type, and recounts its brief history in Polish service

Probably the most elegant C-class German WWI aircraft, at first sight the C.XII looks like a stretched Albatros D.V scout.

Experience and achievements gained during construction and service of the famous fighter apparently influenced design work on the C.XII, though officially it was developed from the earlier Albatros C-class types, and shared the wings of its direct predecessor, the C.X.

The C.XII, which entered production in 1917, was built by Albatros Flugzeug-Werke GmbH and also under licence by OAW, BFW and Linke Hofman Werke. Altogether some 250 were built.

The aircraft was well suited to its reconnaissance roles, with very good ceiling and range. Although it remained in first-line service until the Armistice, it soon lost its favoured position to the superb LVG C.VI and CL types.

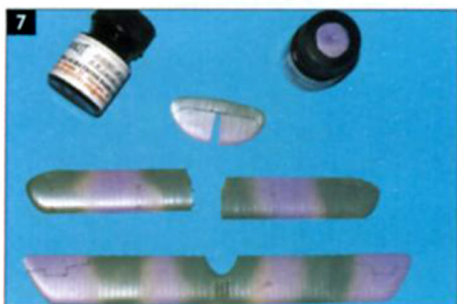
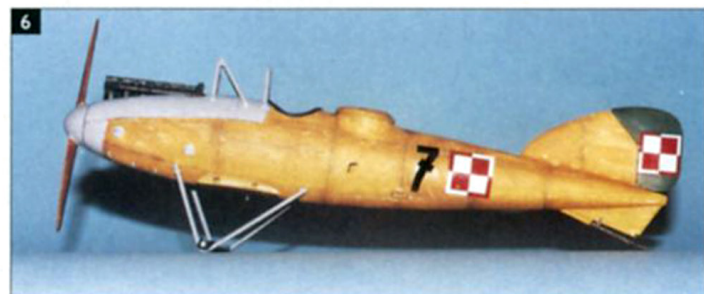
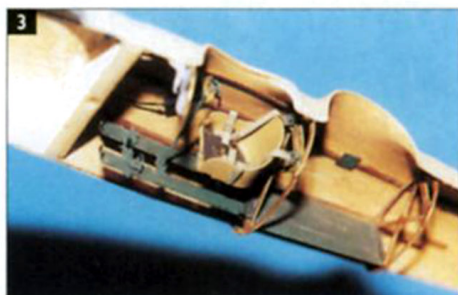
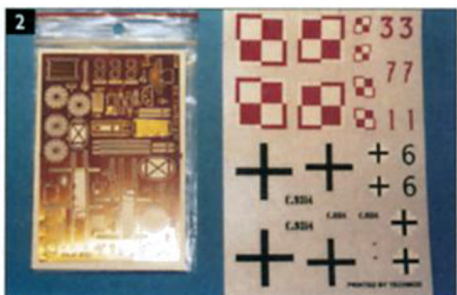
There were 24 Albatros C.XIIs in Poland. Some were captured from German units, some were delivered following the end of the war. They were overhauled and given Polish serial numbers starting from 1, although the highest known serial is 9.

The bulk of the C.XIIs were delivered to the 6th and 7th Aviation Squadrons at Lwow, where they took part in the Polish-Ukrainian conflict. Some

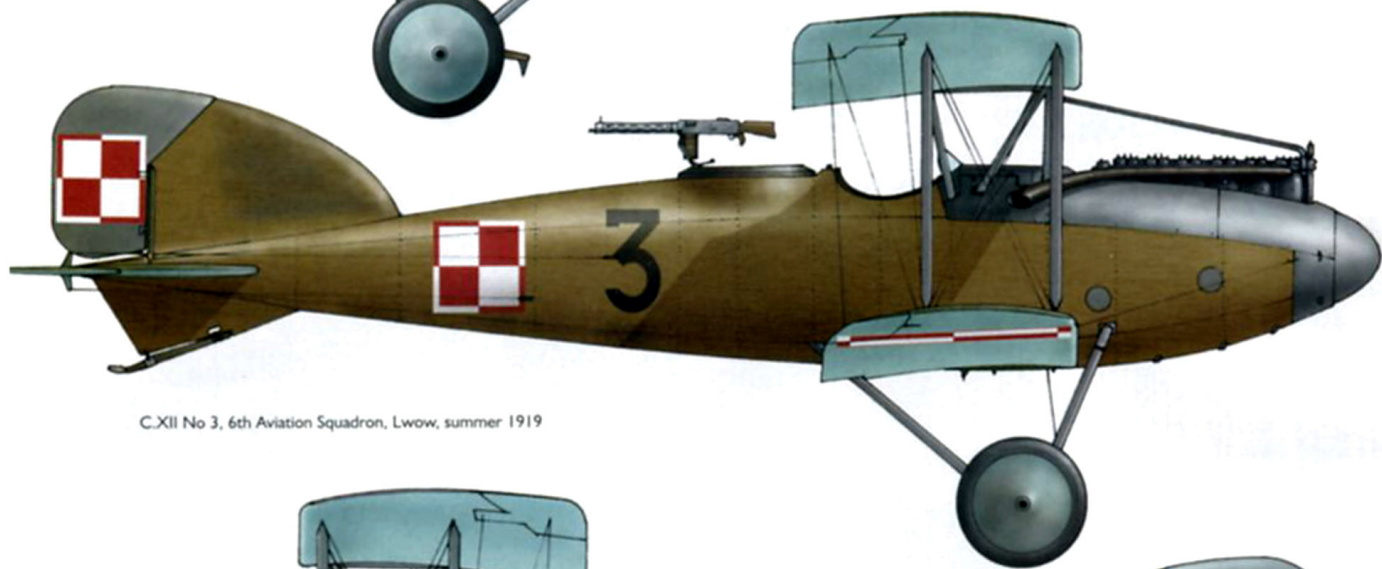
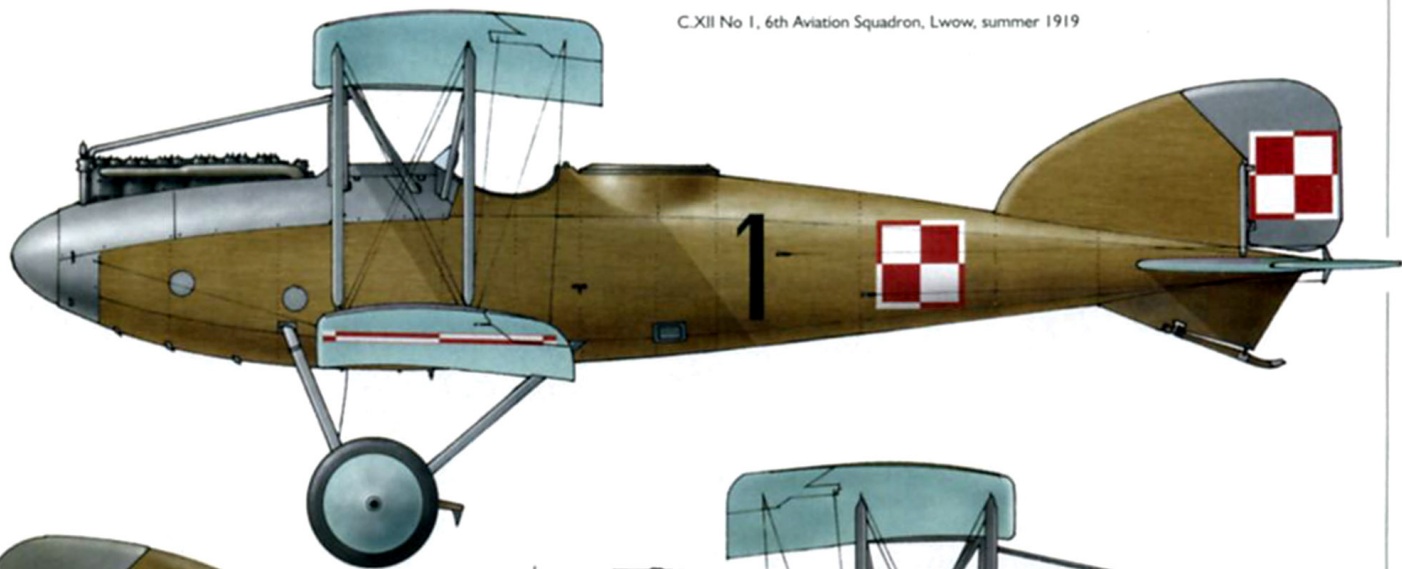
were used during the defence of Warsaw in August 1920. In January 1919 the 1st Liaison Squadron was formed in Warsaw to assure links between Krakow and Lwow, and for that role some C.XIIs were rebuilt to increase their range. One was rebuilt with dual controls for use as a trainer at the Military Aviation School at Warsaw-Mokotow.

From mid-1919 the C.XIIs were slowly removed from service, replaced by more capable Bréguet XIVs and Bristol Fighters purchased from France and Great Britain.

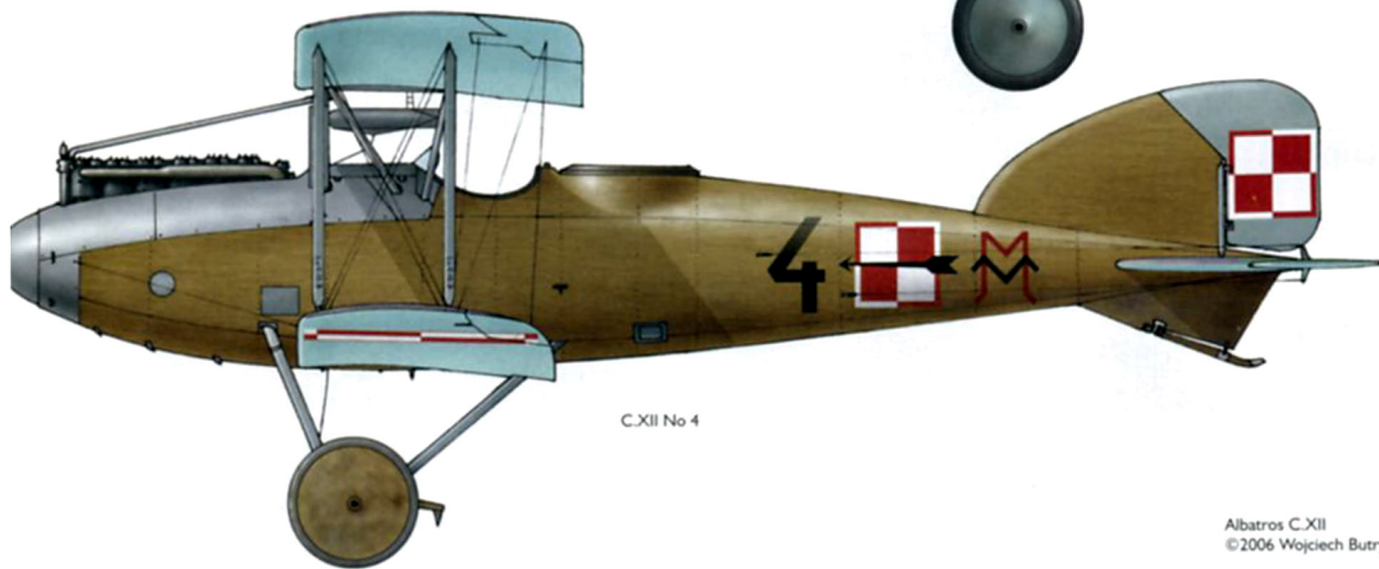
All Polish C.XIIs were equipped with 260 hp Mercedes D-IVa engines and were armed with the



C.XII No 1, 6th Aviation Squadron, Lwow, summer 1919

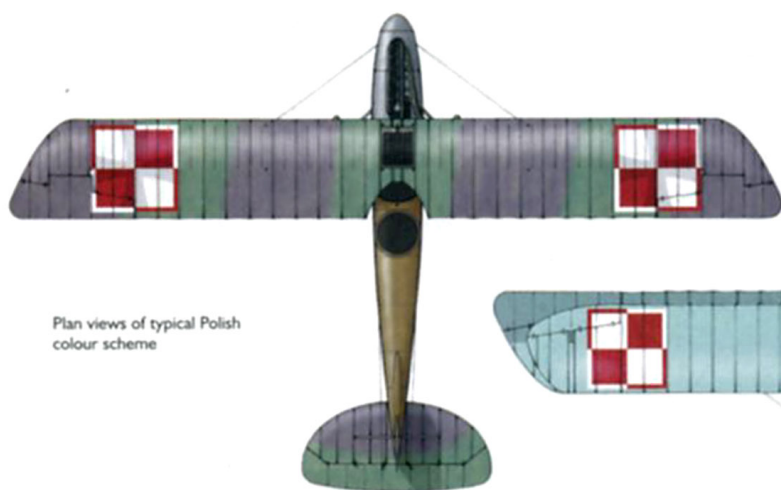


C.XII No 3, 6th Aviation Squadron, Lwow, summer 1919

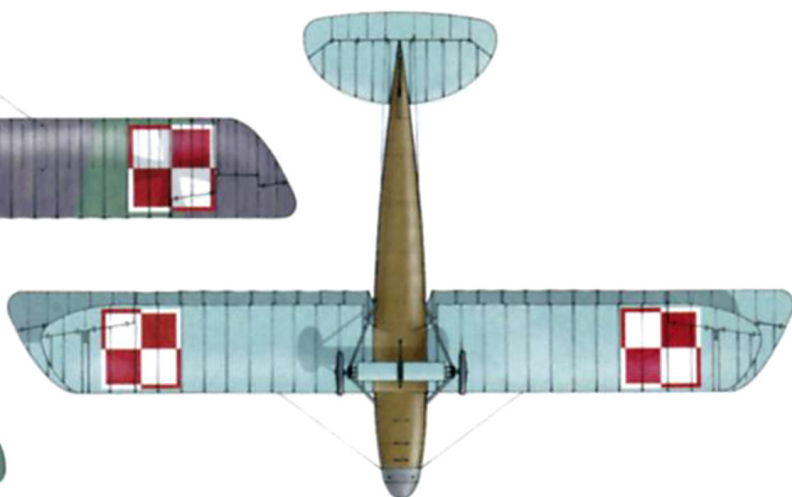


C.XII No 4

Albatros C.XII
©2006 Wojciech Butrycz



Plan views of typical Polish
colour scheme





pilot's 7.92 mm Spandau 08/15, and a flexibly mounted 7.92 mm Parabellum Mk 14 in the observer's cockpit.

The Kit

AIRMO/Jadar is yet another company manufacturing high quality resin models in Poland. The standard of parts is high, on a par with those introduced by Ardpol and Choroszy (Photo 1). Also included is a large photo-etched fret and decal sheet for four aircraft (Photo 2).

I started with the cockpit. Many parts, both resin and etched, are provided to build a convincing and detailed cockpit interior as seen in Photos 3 and 4. With the interior done and resin Mercedes D-IVa engine installed, I glued together the fuselage halves and tackled that distinctive Albatros elliptical tailplane. This was enhanced with photo-etched



control horns (Photo 5) and set aside for painting.

Next came the rudder and tailskid, and the cabane struts and main landing gear. These latter items were constructed from Strutz and attached to the fuselage, which was then painted and weathered to simulate light plywood skinning, with grey metal engine cowlings and rudder overpainted dark green. All was coated with Klear/Future ('Sidelux' in Poland) and the decals added. I did not consider kit decals to be correct, so I exchanged the Polish national marking 'chessboards' for those from Techmod's Polish National Insignia sheets, and repainted the supplied red '7' as the correct black figure (Photo 6). Wings and tailplane were painted with MisterKit's WWI paints Albatros green and mauve (Photo 7). The wings were decalled at this stage.

Now to the details. Spandau and Parabellum machine guns were made from the excellent photo-etched parts, which can be obtained separately from the kit (Photos 8 and 9). For the spoked wheels I

employed my usual method: rubber gasket of the proper diameter (and colour, by coincidence!), one flat etched spoked wheel for the inner side, a rim made of painted Tamiya masking tape, and another etched part formed into a 'flattened cone' shape for the outer spokes and rim (Photo 10).

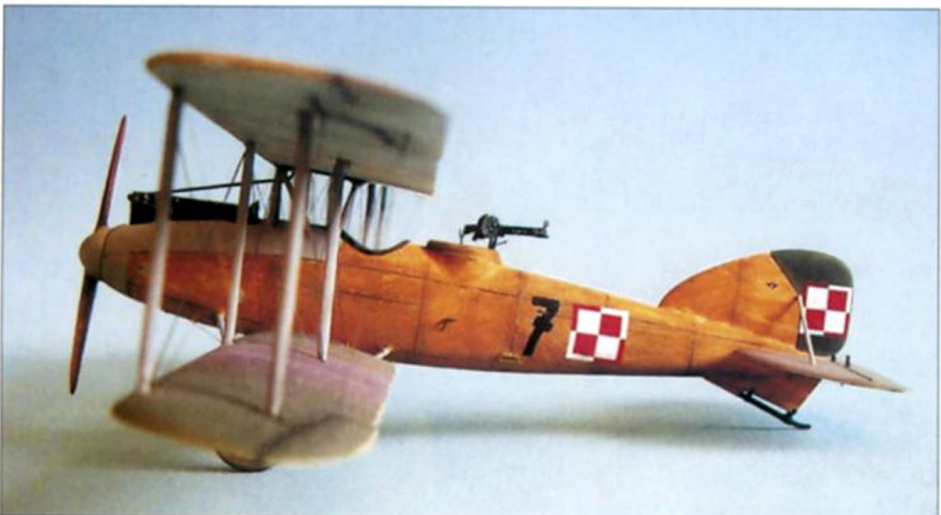
Wings, tail and all supporting struts, made from Strutz, were added next to the almost finished fuselage before all was sprayed with Humbrol MattCote. Now, rigging could start. Control cables and all other rigging were made from Lycra thread. The stages for the control cables are shown in Photos 11, 12 and 13. Rigging for wings was prepared as follows. First I predrilled 0.3 mm holes in lower wings, before these were painted and glued to the fuselage. Then I anchored one end to the upper wings/struts, while the other ends were threaded through the holes (Photo 14) and tautened with the use of clothes pegs. The holes were then filled with small drops of superglue and allowed to set for five or ten minutes. Once dry the remaining thread was cut off with sharp scalpel.

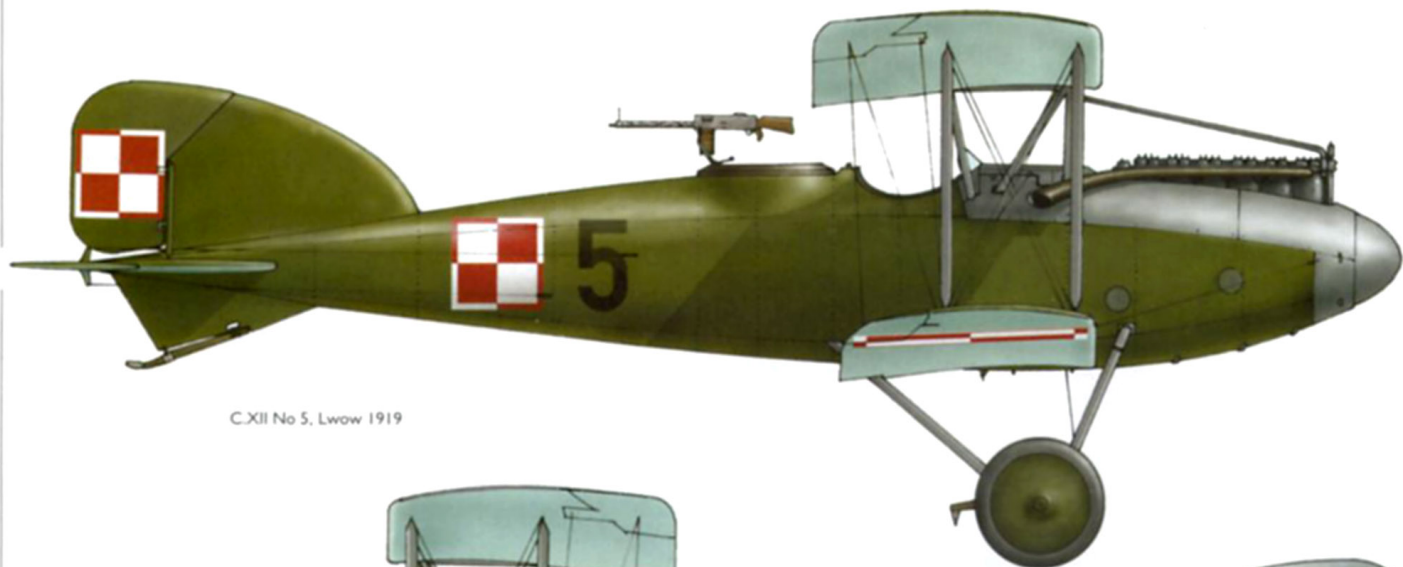
A similar method was used to rig undercarriage bracing wires as seen in Photo 15. Addition of smaller details like engine fuel tubing and exhaust (Photos 16 and 17), windshield, ground brake and weathering such as paint chipping around the edges (yes, paint does chip off fabric covered areas!) completed work on the C.XII.

Wojciech Butrycz

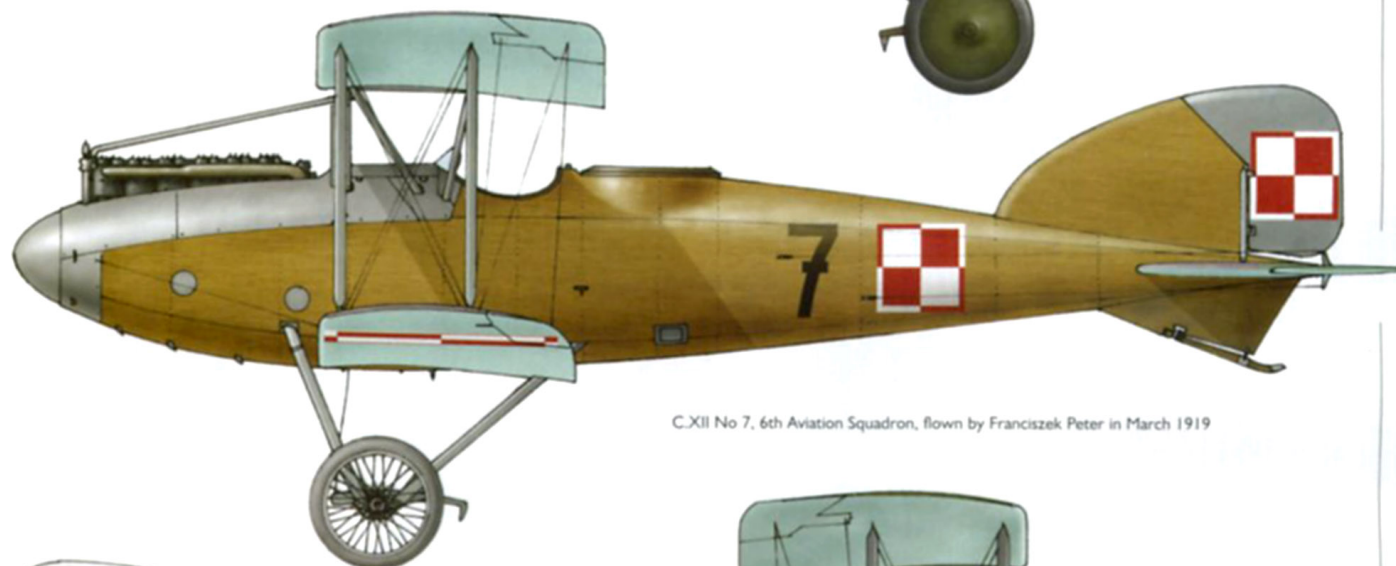
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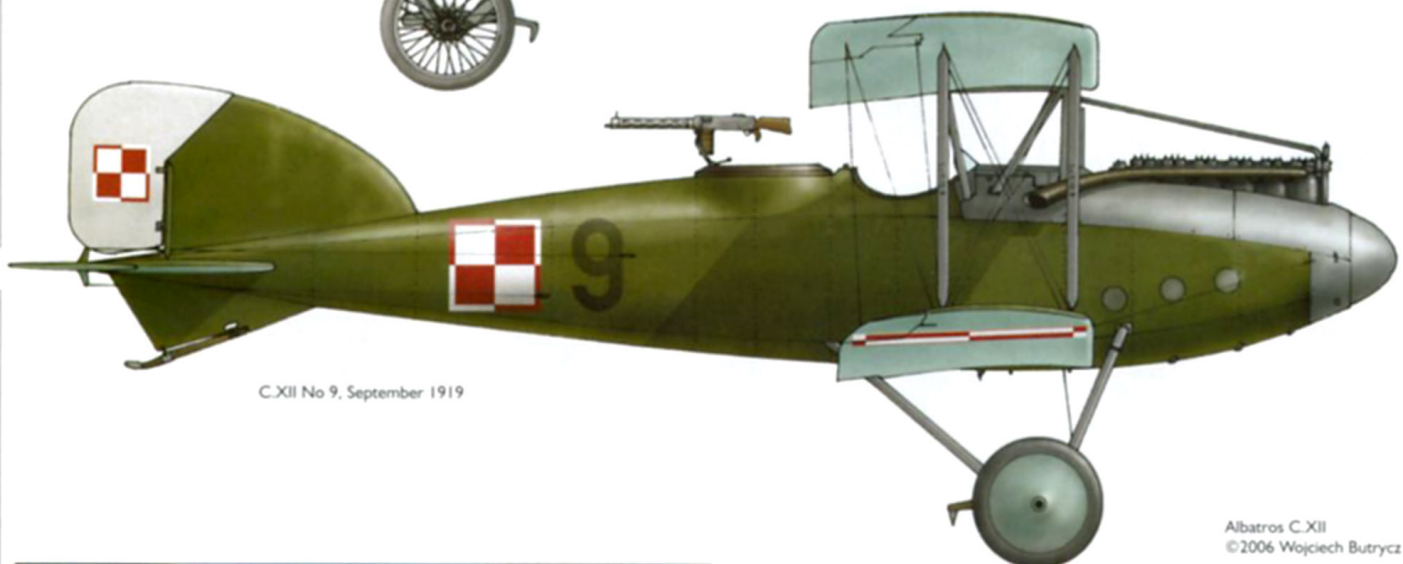




C.XII No 5, Lwow 1919

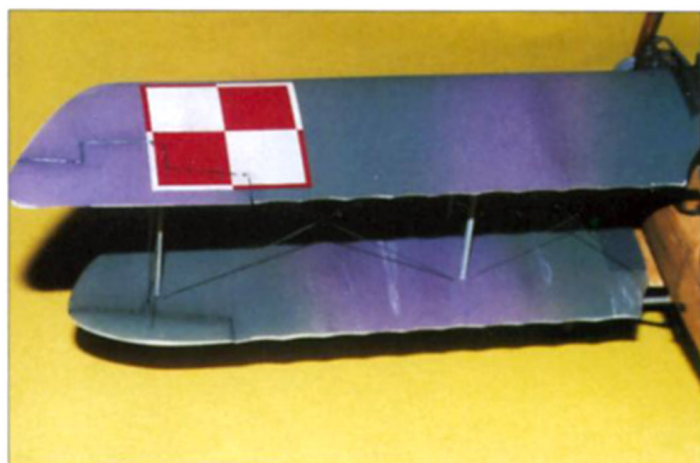


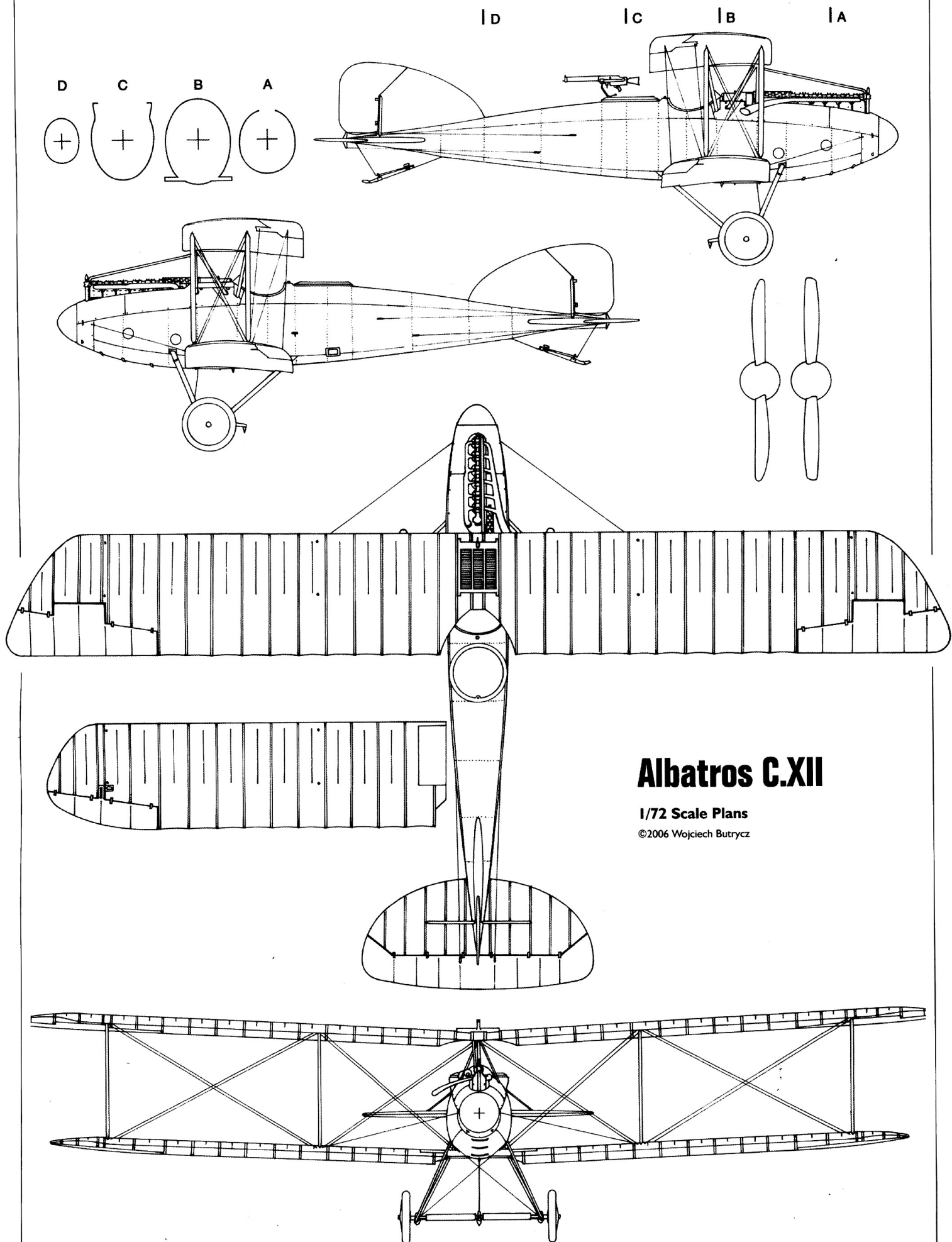
C.XII No 7, 6th Aviation Squadron, flown by Franciszek Peter in March 1919



C.XII No 9, September 1919

Albatros C.XII
©2006 Wojciech Butrycz

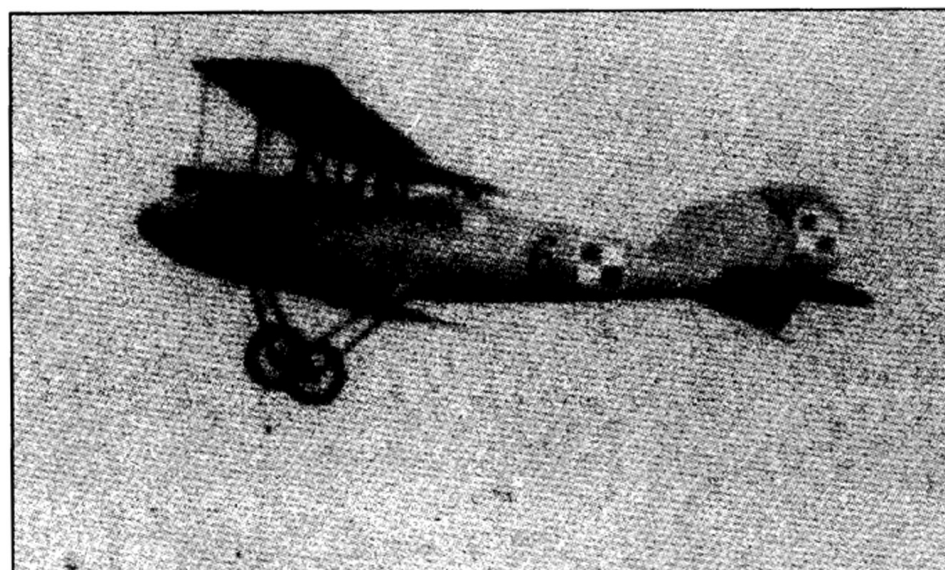
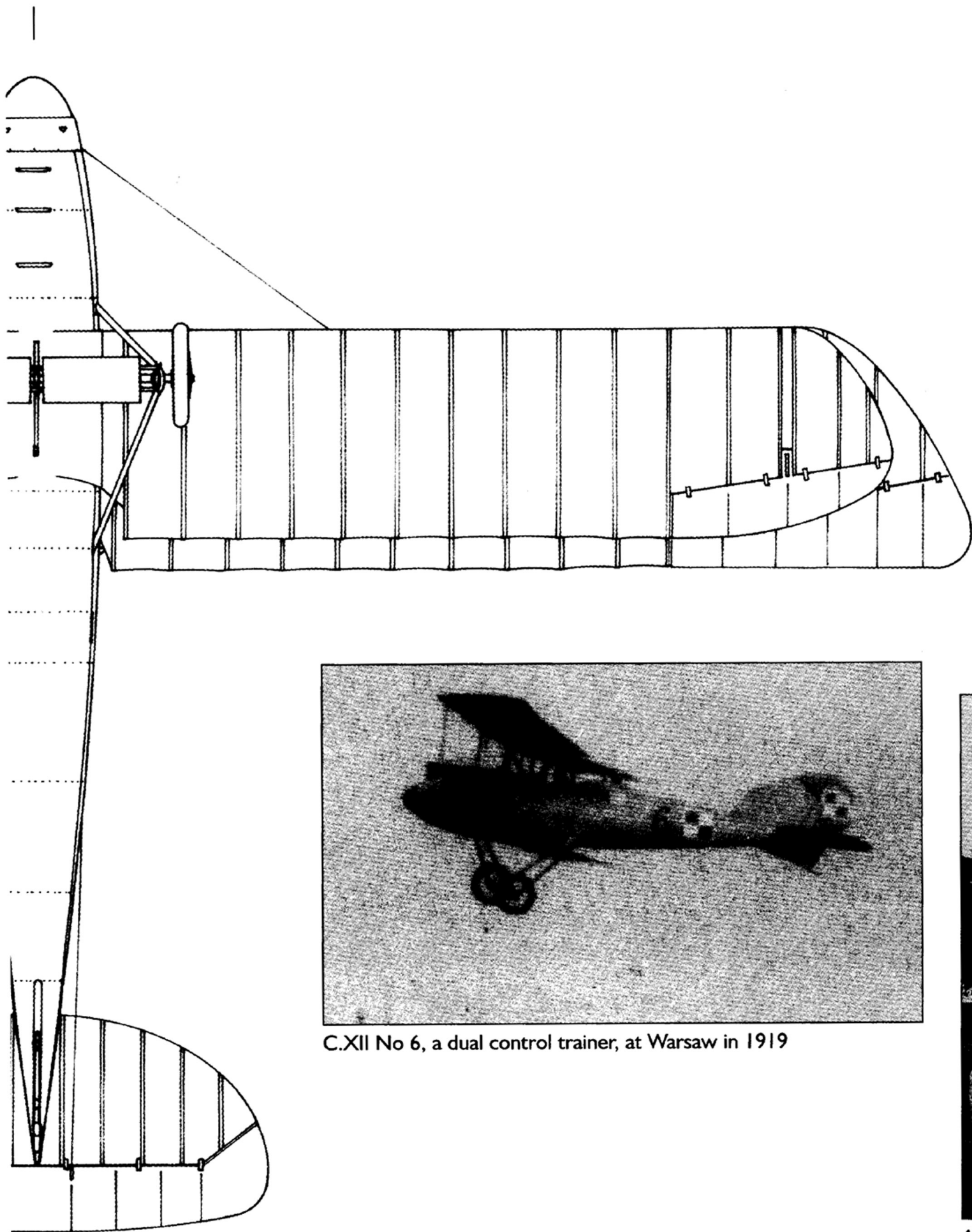




Albatros C.XII

1/72 Scale Plans

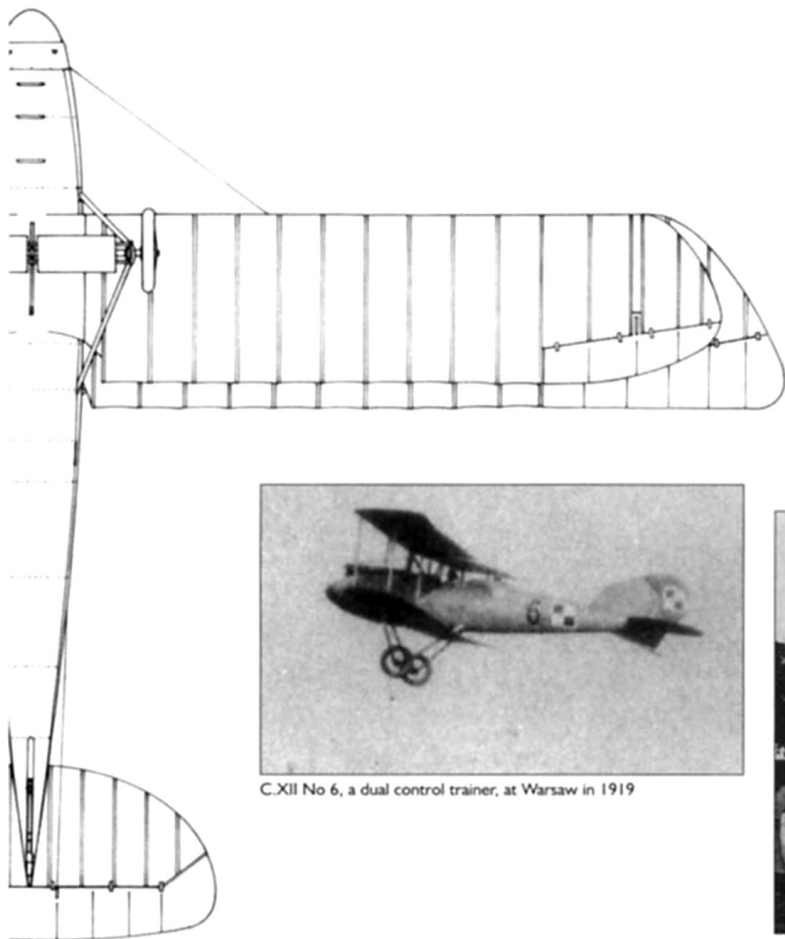
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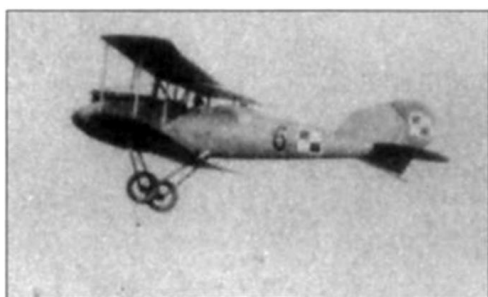
C.XII No 6, a dual control trainer, at Warsaw in 1919



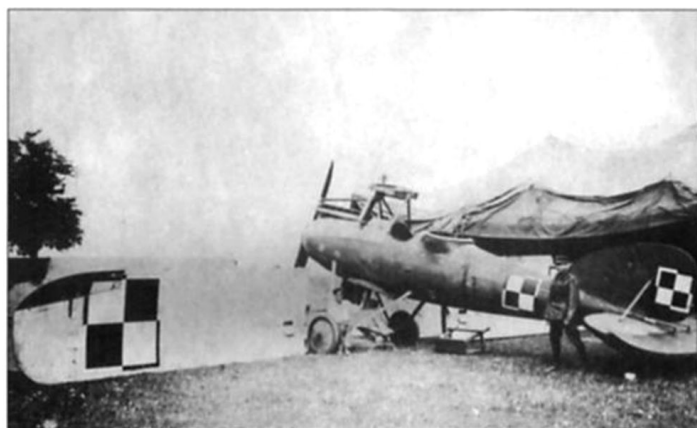
Aircra



Albatros C.XII from unidentified unit. Note arrowhead motif on the fuselage side



C.XII No 6, a dual control trainer, at Warsaw in 1919



Aircraft No 1 from the 6th Aviation Squadron being assembled at Lwow airfield



Airmen from the 6th Aviation Squadron sharing impressions after a Summer 1919 mission, with C.XII No 3 in the background



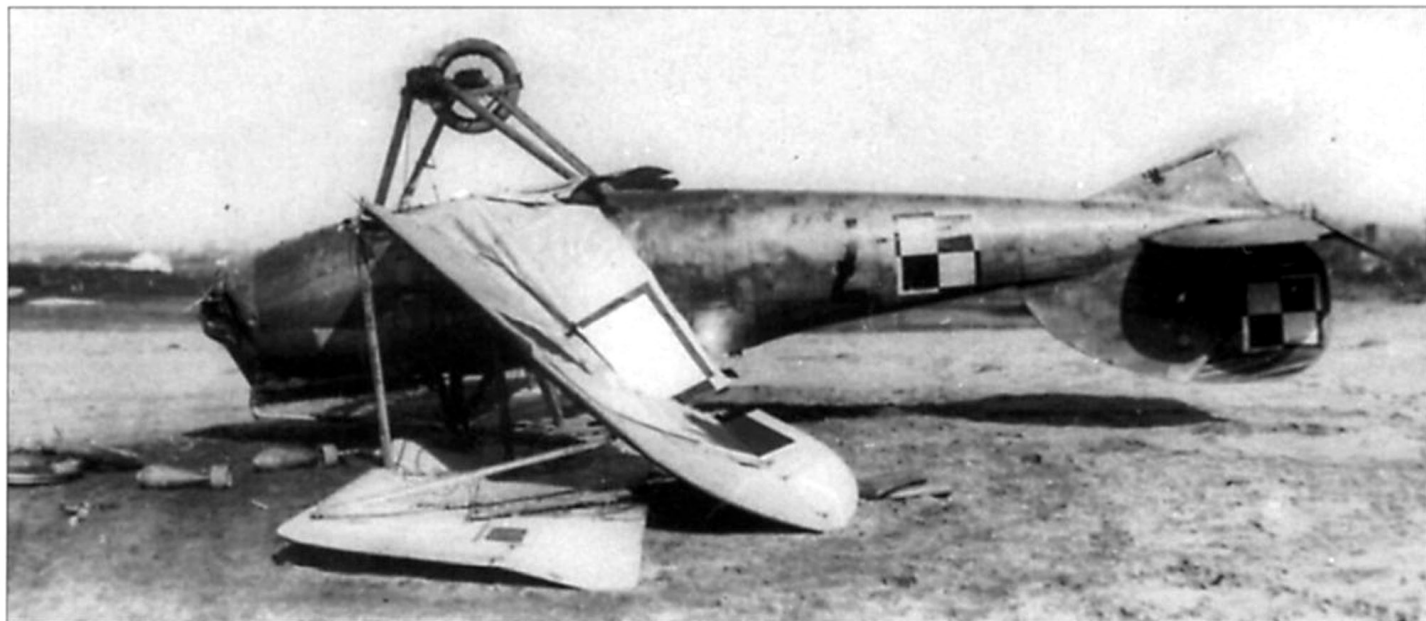
above and below: C.XII No 5 on Lwow Airfield in 1919



above and below: C.XII No 9



above and below: Albatros C. XII No 7 (1832/17) from 6th Aviation Squadron was destroyed in a take-off accident in which crewmen Franciszek Peter and Stanisław Pietruski were injured. This aircraft is the subject of the model featured here





1/32nd Scale

Manufactured by

Revell

Gold Standard Hurricane

Radu Brinzan describes how he took Revell's old 1/32 Hurricane and turned it into a breathtakingly detailed IPMS Scale Modelworld Gold winner

At the end of 1938, after King Carol II of Romania inspected the Hawker Hurricane production line in England, the Aeronautica Regala Română (ARR, Royal Romanian Aeronautics) placed an order for 12 Hurricanes. At the time Romania was working hard to improve the inventory of the ARR with high-performance aircraft. The Hurricane definitely fitted the bill. By the day's standards it was an impressive aeroplane, featuring a watercooled Rolls-Royce Merlin V12 engine, retractable landing gear, cantilever wing, and enclosed cockpit, combined with good climbing speed and range and the devastating punch delivered by the eight .303 in machine guns housed in its wings.

The ARR used the Hurricane in the coastal defence role as part of the independent 53rd Squadron based at Mamaia and later at Salz. The Hurricane became legendary when, during the first days of WWII, Lt Horia Agarici succeeded in shooting down three Soviet bombers in one mission.

As the war progressed, the Hurricanes fell increasingly into disrepair. Some were assigned to training units while others were cannibalised for spares. None of the ARR Hurricanes survive today.

One mystery that baffles ARR enthusiasts is the type of wing fitted to the Romanian Hurricanes. The serial numbers of the (L2xxx series) point to Mk Is fitted with fabric wings. The first delivery took place on the 27 August 1939, around the time when the first metal-winged

Hurricanes began to appear. For some unclear reason, which has led to a lot of speculation since, some if not all of the 12 Romanian Hurricanes were also fitted with metal wings, a fact supported by the many photographs that have surfaced in the last 15 years, not one of which shows a fabric-winged aircraft. After the fall of Yugoslavia in 1940, three Zmaj-built Hurricanes captured by the German forces were delivered to ARR. It is known that these three aeroplanes were fitted with fabric-covered wings, but these particular airframes seem to have been very camera-shy.

The Kit

I became interested in the ARR Hurricanes around the mid-1980s when an article on the subject was published in the Romanian magazine *Modelism*. In fact, my first 'proper' model (featuring painted camouflage and some scratchbuilt parts) was a 1/72 ARR Hurricane. In the meantime, I became increasingly interested in large-scale models and a while ago decided to build another ARR Hurricane, this time in 1/32 scale. The only model available was the Revell kit, and last year I purchased a 1/32 Revell Hurricane Mk I and the Eduard photoetch set for it from a modeller in Canada. When I compared it to the excellent Arthur Bentley drawings* it was obvious that the kit was quite accurate dimensionally, with only a few areas that needed improving. I must emphasise that these drawings are a must for anyone that wants to build a

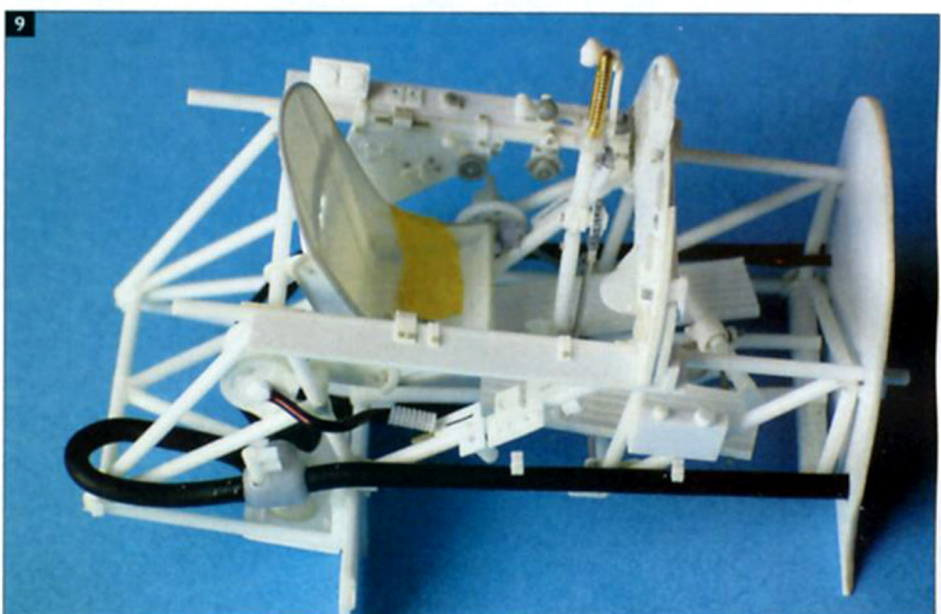
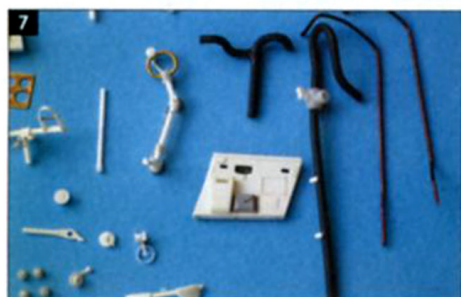
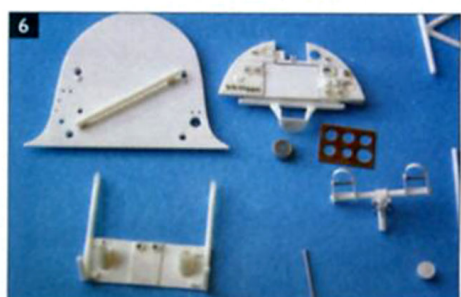
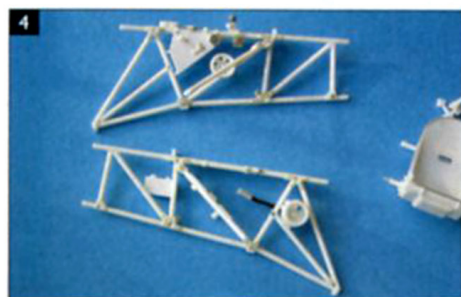
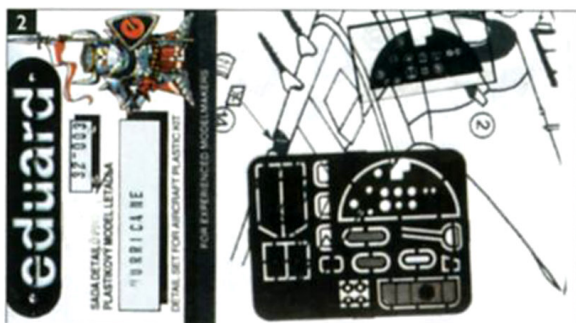
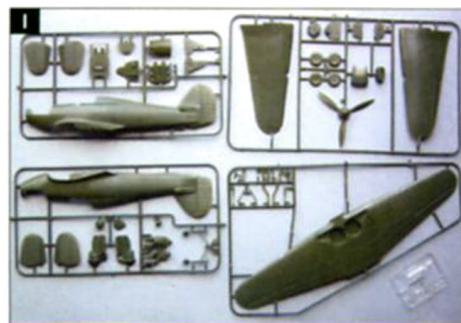
Hurricane in any scale — they were used extensively during the building of this model. The drawings I had were to 1/72 scale, so I scanned and enlarged them to 1/32.

The Revell kit was released in the early 1970s and features raised panel lines, 'donut' rivets and a working (read 'clunky') canopy (Photo 1). It suffers from relatively poor detail in the cockpit, and the wheel wells are overscale. The Eduard photoetch sheet is very basic, and none of the detail provided is really usable (Photo 2) — the only parts I used from it were the acetate film with the instrument faces and the central blind flying instrument panel.

Cockpit

The cockpit supplied by the Revell kit is basic to say the least, so detail had to be found elsewhere. However, at the time there was no available improvement set (that situation has been addressed in the meantime) and the Eduard set does little, so I had to scratchbuild the cockpit. There is no way of describing in words what kind of work was involved, but with the help of photos I will try to show the parts that went into it (Photo 3).

The cockpit of the Hurricane was simply hung from the tubular framework of the fuselage. Arthur Bentley's drawings clearly show the complex structure, and this was the starting point. The drawings were printed out and a plastic tubular framework built in the same manner as that used for building flying models from balsa wood: 1.2 mm Evergreen rods were placed on top of the drawings,



cut to size, held with pins on either side and glued following the lines underneath. The side frames are shown in Photo 4.

The rest of the parts were cut from 0.5 mm styrene sheet using photos from the book *Hurricane Inside and Out* as reference, as well as the drawings. Photo 5 shows the seat, floor, rear bulkhead and an element of the rear frame. The seat itself was made from 0.3 mm sheet and attached to the rear crossbars by 0.7 mm brackets. The Hurricane did not really have a floor as such; there were only two duckboards attached to the fuselage frame. The two bars of the fuselage frame were the main starting point. These were in turn attached to a rear wing spar and the top part of the forward wing spar (the bottom part of the spar was going to be part of the wheel well). The duckboards were made from 1 mm styrene, the grooves scribed with a Tamiya scribe and then they were attached to the bars. The attachment points for the rudder pedals and control yoke were also attached between the bars. The rear armoured bulkhead and head armour were made from styrene card. On the real Hurricanes, the section behind the head armour tapers into the spine of the fuselage. This part was also made from styrene card using photos from *Hurricane Inside and Out* as a guide.

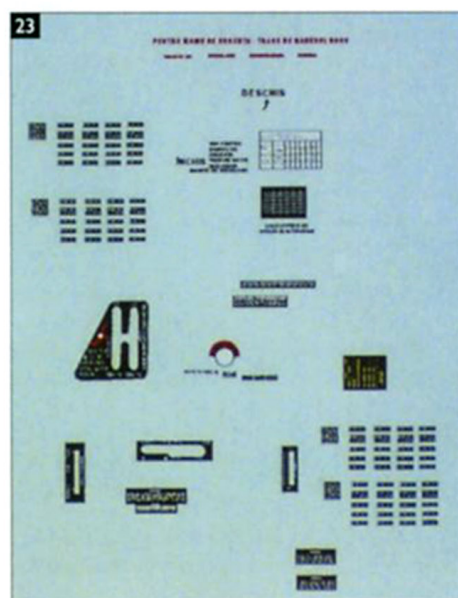
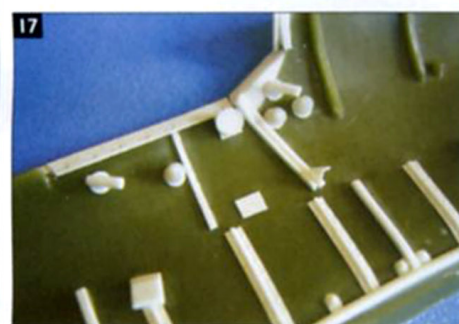
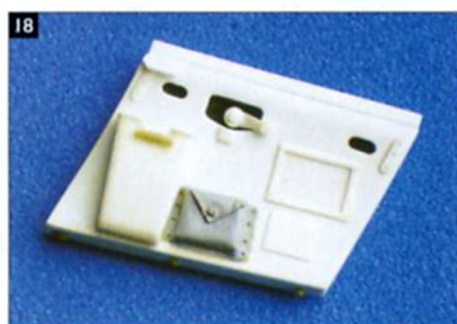
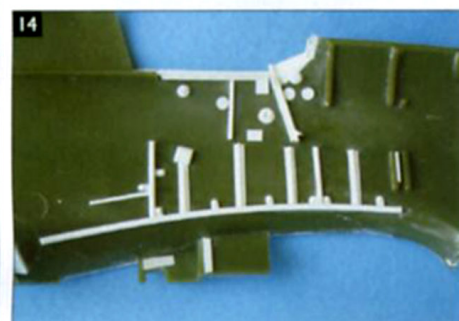
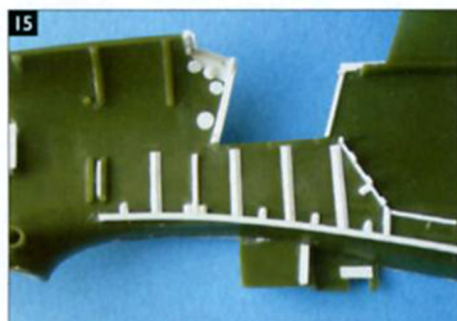
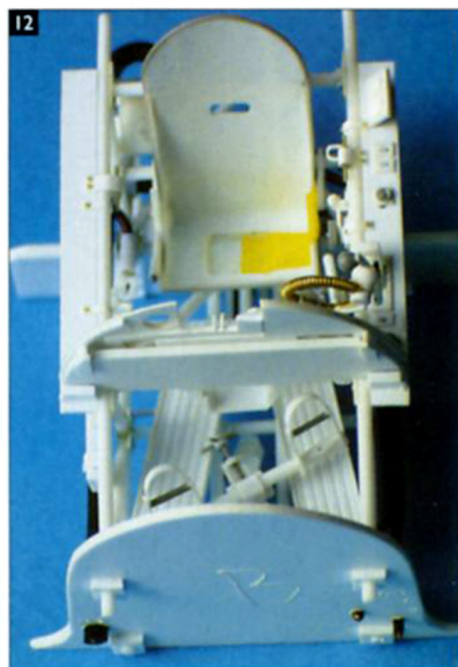
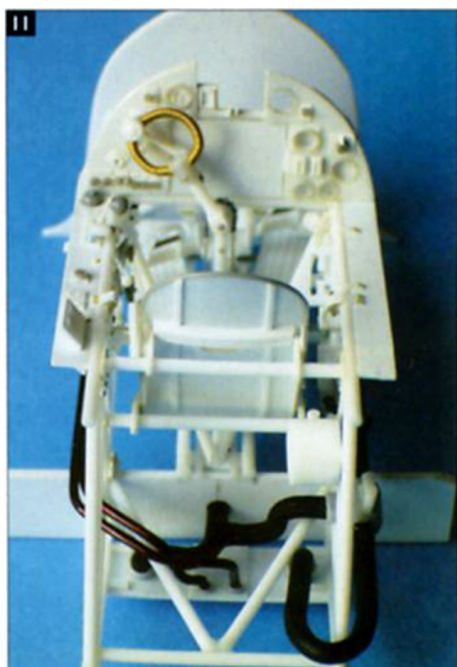
Photo 6 shows the firewall, instrument panel, rudder pedals and the top of the radiator. At first I thought that the Eduard instrument panel was a good replacement, but soon I discovered that it was the wrong shape as it was

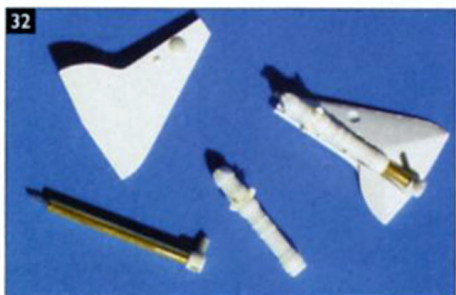
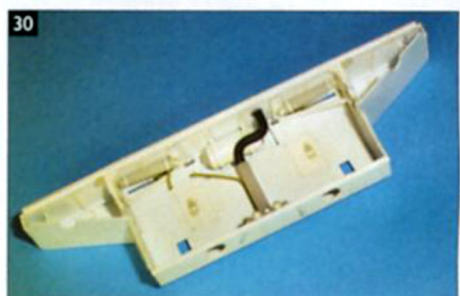
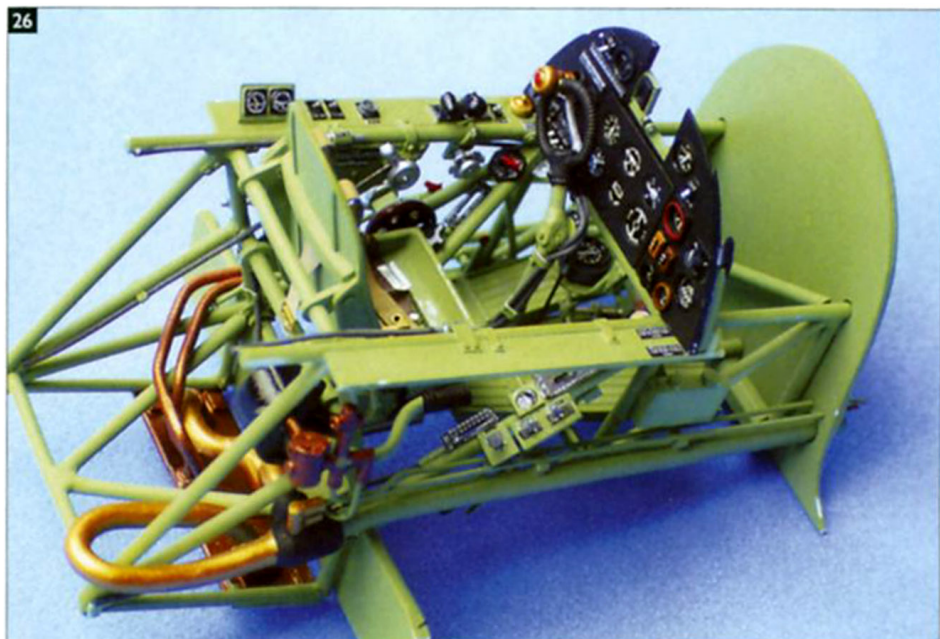
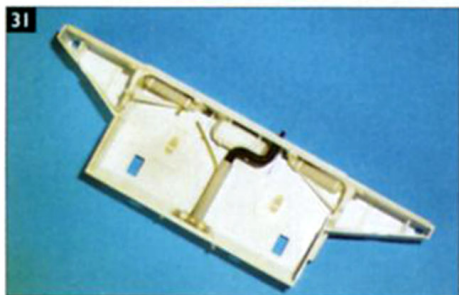
about 4 mm too squat at the top. In the end, I only used the central blind flying panel and acetate instrument faces. The main instrument panel was cut from styrene sheet using the corresponding kit part as a template, holes were punched with a Historex punch-and-die set and the dial rings made from Contrail tubing cut and sanded to size. The other details were made from styrene sheet. The top of the coolant radiator protruded behind the seat and I thought that it might be visible on the finished cockpit (it turned out I was wrong — one needs to try really hard to see it), so I made it from 0.7 mm styrene sheet and the attachment points for the coolant pipes were fashioned from Contrail tubing. The part was then attached to two pieces of fuselage frame as on the real thing. Photo 7 shows the control yoke and rod, coolant and oil pipes, escape hatch, instrument panel coaming and the ring gunsight. The control yoke was made from 1.2 mm Evergreen rod. The spade grip was made from guitar string bent to shape and the chain was made from 0.5 mm solder crimped with pliers. The coolant pipes were made from headphone cable insulation reinforced with copper tubing, which held its shape. The gunsight used on Romanian Hurricanes was the ring-and-bead type. Photo 8 shows the smaller parts such as seat lever, cockpit lights, dimmer switches, etc. The entire cockpit was like a puzzle that needed to be put together in a particular sequence (Photos 9, 10, 11, 12, 13).

The sidewalls were next (Photos 14 and 15). The

ridges on the kit's sidewalls were removed and new detail was made from styrene sheet and Evergreen rod. On real Hurricanes accessories such as cockpit lights, dimmer switches and landing gear horn that were attached to the sidewalls were backed by plywood disks, as the aluminium skin was too thin. On my model these were made from punched-out styrene disks (Photos 16, 17). The rivet detail on the reinforcing ribs was made with a pounce wheel — the indentations on the reverse showed as raised rivets on the front. The indentations on the left canopy rail were made with a jeweller's screwdriver gently tapped with a light hammer. The escape hatch (Photo 18) was based on a piece of fuselage that was carefully removed with a fine saw. The inside detail was made from styrene card. The pouch was made from Tamiya tape painted with Mr Surfacer 1000.

The canopy provided in the kit is too thick, clunky and overscale, mainly because it was meant to be workable. I vacformed a new canopy using a Mattel Vac-U-Form machine and a male plug made from Milliput (Photo 19). In order to fit the new canopy, a few modifications had to be made to the fuselage. The windscreen opening was reduced in size, a new shelf was made to support it and new rails were added. I made the canopy roller supports from leftover photoetch brass sprue (Photo 20). After the sliding part of the canopy was separated from the windscreen, an armoured glass panel was made from styrene card and a roll bar was made from a piece of insulated telephone wire





(Photos 21 and 22). The Hurricane cockpit is covered in placards and instructions for the pilot/groundcrew. With the help of graphic design software and guided by photos in Hurricane Inside and Out, I designed a set of placards (in Romanian) and printed them with an Oki DP5000 printer on Tango Papa decal paper (Photo 23). The cockpit was painted with Lifecolor Interior Green, the instrument panel Lifecolor matt black and the details were painted with a variety of acrylic and enamel paints. The coolant and oil pipes were painted with Humbrol MetalCote copper and brass (Photos 24, 25, 26, 27 and 28). For the seatbelts I used the excellent MDC Sutton Harness set painted Tamiya buff. The decal placards were applied next and after they had dried the whole cockpit was weathered discretely with some 'paint chipping' and a light dusting of dark grey chalk pastels.

Wheel well and landing gear

The wheel well provided by the kit is very inaccurate and since no suitable replacement was available, a new one needed to be scratchbuilt from styrene sheet (Photos 29, 30 and 31). The retract pistons were made from Contrail styrene tubing. The air tank was made from a piece of sprue wrapped in styrene sheet to bring it to the right thickness, then turned in a lathe in order to get the round ends. The straps were made from styrene strips. The fuel drain unit on the rear wall of the wheel well was also made from Contrail tubing and punched disks of styrene. The

coolant pipe was made again from a piece of headphone insulation reinforced inside by a copper wire bent to shape.

The landing gear and doors provided by Revell are not entirely bad and may be usable with a little bit of cleaning up. In this case, I chose to scratchbuild new units (Photo 32). The legs were made from 6 mm Evergreen tubing turned in a lathe. The piston parts of the legs were made from brass for strength with a 7 mm pin glued at the top as a connection point. The doors were made from styrene sheet, with the 'blister' parts from sprue and Evergreen rod turned in a lathe. For the forward angled part on the inside of the door, first I sandwiched three triangular pieces of 1 mm thick card with superglue in order to obtain the right thickness, then coarsely trimmed with a knife and sanded to shape. The rear angled part on the inside of the door was made in the same way, using a sandwich of only two pieces of plastic. Photo 33 shows all parts of the wheel well and landing gear, including the retract levers and rear radius rods. The wheel well was then painted aluminium inside and Interior Green on the outside, as the top of the wheel well is visible from the cockpit (Photos 34, 35). The compressed air tank was painted a light grey and the coolant pipe insulation white. All piping was painted brass with Humbrol MetalCote.

One thing that has to be mentioned at this point is that ARR Hurricanes were fitted with five-spoke wheels. For my model, I used a set of wheels 'borrowed' from a Hasegawa Spitfire.

Fuselage

The fuselage as provided by Revell suffers from inaccuracies that needed to be addressed. All of the raised surface detail was removed by sanding and then rescribed with the help of drawings. For the round fasteners I used a simple tool made from a 1 mm hypodermic tube with a bevelled edge held in a pin vice. When pushed into plastic, it left behind a perfect circular indentation.

I started with the nose. The top of the nose needs to be flatter and wider. The solution was easy: by using brute force, I pushed down the top part by about 2 mm (Photo 36), which in turn widened the base by 1.5 mm (Photo 37). The flattened part was reinforced from inside with a suitably shaped piece of styrene card, which made sure that the flattened shape was maintained. Next, the front part of the fuselage was removed along the panel line and sanded straight (Photo 38). The shape of the new fuselage front was traced on a piece of styrene card which was cut to shape. With the help of a lathe I cut a cylinder 6 mm high and 15 mm in diameter which was then glued onto the piece mentioned earlier (Photo 39). The location of the centre, and therefore the propeller shaft, was determined with the help of the drawings. This assembly was then wrapped in 0.3 mm styrene sheet which was trimmed and sanded to shape. Photo 40 shows the finished nose part along with the armour/prop governor and propeller shaft, which was scratchbuilt from styrene sheet and Contrail tubing. The two scoops on the side of



the nose part were made from wedges of Contrail tubing blended in with Mr Surfacer 1000. Photo 41 shows the finished assembly dry-fitted to the model as well as the boxed-in exhaust openings. The teardrop-shaped blisters on the top part of the nose were also replaced with new ones and blended in (Photo 42). The new blisters were made from a sandwich of styrene sheet sanded to shape.

The ARR Hurricanes were fitted with de Havilland propellers and spinners. For the spinner, I modified an item from the spares box — an old Hasegawa Spitfire spinner. This was mounted on a mandrel and turned to shape in a lathe then shortened (Photo 43). The Revell propeller blades were removed from the spinner and trimmed roughly to shape with a saw (Photo 44). Afterwards, they were further shaped and sanded until the desired profile was obtained. A new backplate with propeller blade hubs was made from styrene sheet and Evergreen tubing. Photos 45 and 46 show the end result.

The fabric effect on the flying surfaces as represented by Revell was quite exaggerated — in fact, they look like Hessian sacks stitched with barbed wire and needed to be improved. Photo 47 shows the method used and the final result in the case of the tail. First, the rudder was removed with a saw (I was a bit careless while cutting, so I needed to correct my mistake with some styrene card). Then, the existing fabric effect was removed by sanding until a flat and smooth surface was obtained. I cut Dymo labelling tape into 0.5 mm strips, which were applied on the

location of the 'ribs'. The front part was covered with masking tape according to the drawings. Afterwards, the exposed areas were sanded with increasingly finer grades of sandpaper. The strips and masking tape were nearly destroyed in the process, leaving behind a nice and credible fabric effect. The same treatment was applied to the rudder, which was then improved by adding the hinges, tail light housing, control horns and trim tab, all made from styrene sheet and Evergreen rod (Photo 48). Photo 49 shows the dry-fitted finished rudder and tail as well as the improvements made to the tailwheel and tailplane areas. A stirrup ladder and housing was also made from styrene sheet — this part is posable in either stowed or extended positions (Photo 50).

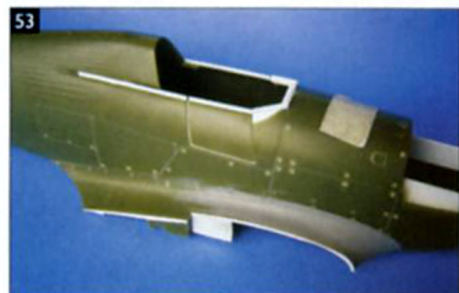
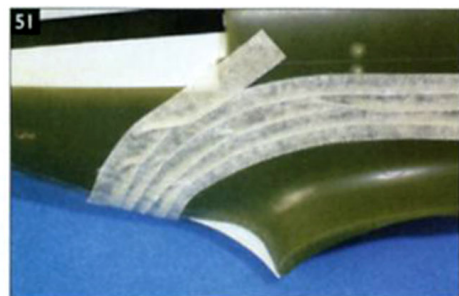
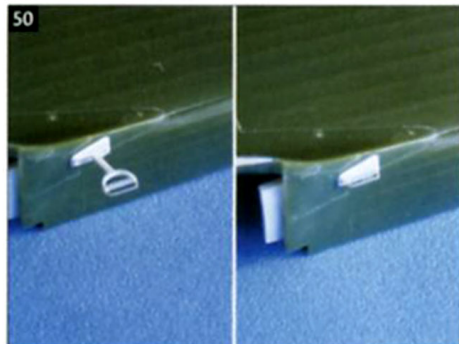


One very noticeable error with the Revell kit is the wing fillet, which is too shallow at the front end. I decided to use Milliput in order to beef it up a bit. A piece of styrene sheet shaped with the help of the drawings was glued as a guide to the front of the wing fillet. The contour of the fillet was marked with masking tape (Photo 51), then Milliput was applied and coarsely shaped before drying. After drying, the filler was sanded and brought to the right shape (Photo 52). A finishing coat of Mr Surfacer was applied and sanded smooth (Photo 53).

Photos 54 and 55 show the modifications made to the fuselage in comparison with unmodified parts. These photos also show the extent to which the top of the spine behind the cockpit was sanded to a flatter shape. The ARR Hurricanes used early style exhausts and tailwheel (Photo 56). The tailwheel — nothing more than a button as provided in the kit — was improved by using the lathe to cut a groove separating tyre from hub. The exhausts were also made by converting a set of Hasegawa Spitfire units. The pipes were made from Contrail tubing and the welding was simulated with Mr Surfacer applied with a fine brush.

Wings

The wings also needed some modification. First, the ailerons and flaps were removed and the corresponding openings were modified according to drawings. The raised detail was sanded and new panel lines rescribed (Photo 57). The wheel well openings provided by Revell

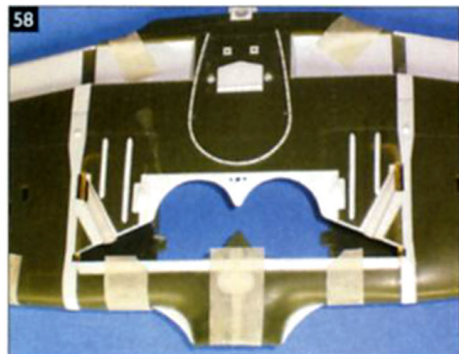


were too big. These were removed and a new opening was made. Photo 58 provides a better glimpse of these modifications made to the centre of the wing. A brass rod was glued on each of the edges of the wheel well in order to provide a strongpoint for the landing gear legs — a 7 mm hole was drilled in each for the landing gear leg pin. The wing fillet was modified in a manner similar to that used for the fuselage items. A piece of styrene card was shaped and glued in place at the roots as a guide, then Milliput applied, shaped and sanded (Photo 59). A finishing coat of Mr Surfacer 1000 was sprayed and polished (Photo 60). Photo 61 shows the upper wing strap as well as the strengthening plates and filler cap of the oil tank. Photo 62 shows the details of the flap bays, rear identification lamp and the details around the radiator.

The ailerons were removed according to Arthur Bentley's drawings — the aileron line is too far aft as scribed by Revell. The aileron bays were boxed in and new hinges were made from styrene card (Photo 63). The fabric effect on the ailerons was represented in the same manner as that used for the tail (Photo 64). The location of the kit's ribs is also wrong, so they were rescribed. Photo 65 shows the finished ailerons as well as the new scratchbuilt flaps. The flaps were made from 0.5 mm styrene. The ribs were cut from 0.3 mm card and glued in place. After the glue had dried they were drilled with a 1.2 mm bit and rod inserted through these holes and glued.

The flap hinges were made from Contrail tubing cut into 1 mm thick rings through which the rod was threaded, and then they were glued in place. Photos 66, 67 and 68 show the modifications made to the wings compared to unmodified parts. Photo 69 shows the modified tailplanes. After they were separated, the fabric effect was rescribed and new spars and hinges were scratchbuilt. New scratchbuilt fixed and movable trim tabs were also added to the trailing edges.

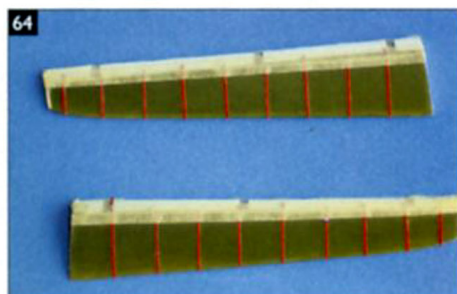
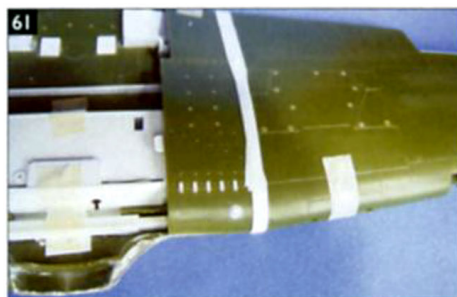
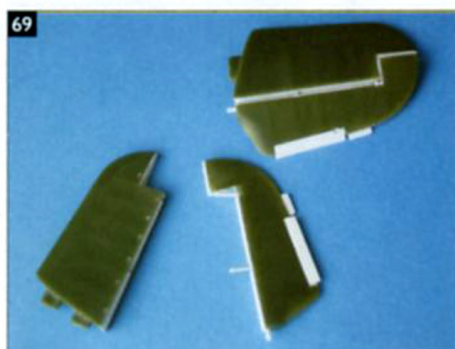
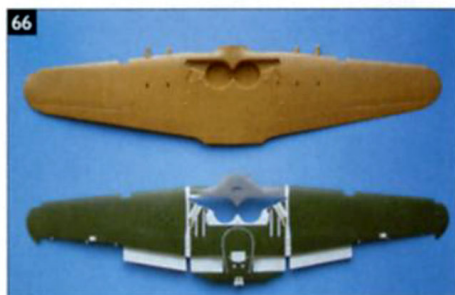
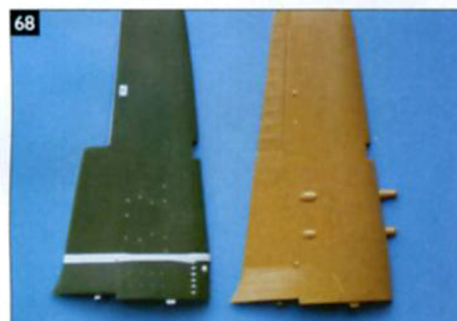
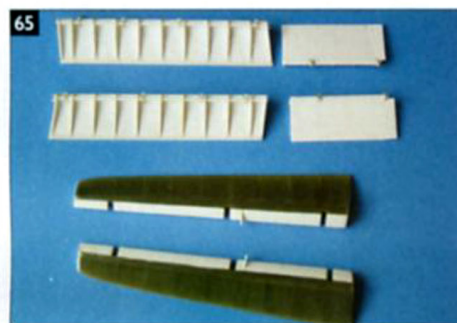
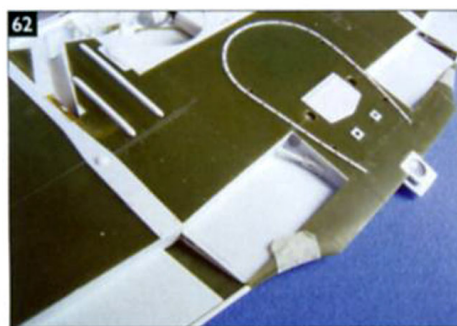
The kit does not provide any landing lights, so new units were scratchbuilt (Photo 70). The dish parts were made by crash-moulding pieces of 0.5 mm styrene card around spherical male plugs (these were made from fake pearls mounted on brass pins) then sanded to size. The



light fittings were made from Evergreen rod and the supports from curved stretched sprue. The inside of the wing, rear spar and diagonal truss behind the lights are visible in most photos of the real aircraft, so these were scratchbuilt from styrene sheet. These were based on photos rather than drawings, so they needed to be repeatedly trimmed and dry-fitted. Wingtip position light fittings were also scratchbuilt (Photo 71). A cable would be added after painting between the rings (representing the light bulb sockets) and the rectangular boxes. New clear parts were vacformed along with clear parts for the landing lights.

The ventral radiator was also modified (Photo 72) by sanding and rescribing. The radiator flap was removed and a new one was scratchbuilt from styrene card. The ARR Hurricanes were fitted with the early type oil/coolant radiator, and this was scratchbuilt from brass mesh glued on top of a suitably shaped unit made from styrene sheet (Photo 73).

Assembly of all fuselage parts went without much trouble. All of the scratchbuilt parts were thoroughly dry-fitted during the construction in order to make sure that parts would not interfere with each other (for example the scratchbuilt wheel well and cockpit) so everything more or less fell into place. The most difficult part was the joint between wing and fuselage. Out of the box the fit is sloppy, so a lot of sanding was required. The joint line at the rear of the wing was filled in with superglue, sanded



smooth and the panel lines scribed (Photo 74). The forward joint between lower part of the wing and fuselage was a different story altogether. Because the wing fillet was heavily modified, the fit was not the best. The joint line was filled with superglue and sanded smooth, then coated with Mr Surfacer 1000 and polished.

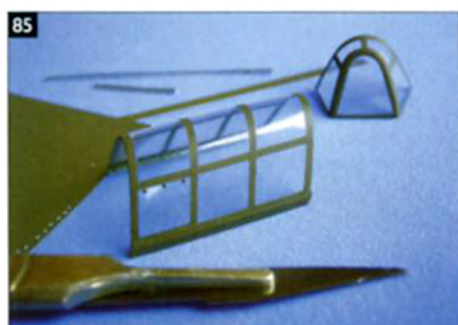
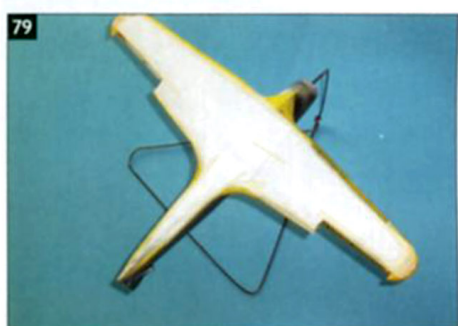
Some panel lines and fastener details had to be rescribed (Photo 75). The central panel of the lower side of the nose is visibly flat on real Hurricanes but quite round on the Revell kit. Before joining the wing and fuselage, I filled the inside of the lower part of the nose with layers of styrene sheet and superglue. After the wing and fuselage were joined, the lower part of the nose was sanded across from the wheel well to the tip of the nose until a suitably flatter appearance was obtained. The underside of the nose was sanded through and in the end, that panel line separating the nose and wing was actually scribed into that styrene sheet and superglue packing. The two blisters on the underside of the nose had to be scratchbuilt again — other scratchbuilt bulges had been in place before but they were removed during the flattening of the nose. The joint between the upper parts of the wing and the fuselage had been improved earlier in the construction when the wing fillets were modified. However, there were still some fit issues, especially around the front end. Some Mr Surfacer 1000 was applied on the joint line and after it was sanded, some detail needed to be rescribed (Photo 76).

Painting and colours

The ARR Hurricanes were delivered in the standard colours used by the RAF in 1939: Dark Green and Dark Earth upper surfaces, Night and White wing undersides and aluminium dope fuselage underside. In 1939, the following markings were applied to the ARR Hurricanes: tricolour roundels were applied to the wings, the entire rudder was painted blue, yellow and red, the airframe number (1 to 12) was applied to the fuselage and narrow yellow stripes were applied to the fuselage and wings. After the beginning of Barbarossa in June 1941, the national markings changed including the markings applied to the ARR Hurricanes. Yellow Eastern Theatre of Operations markings were introduced: the underside of wingtips was painted yellow, a wide yellow band was painted on the fuselage and the spinner was painted two-thirds black and one-third yellow. Later, the nose was also painted yellow. New yellow crosses, bordered in white and blue and enclosing a small tricolour roundel were introduced based on the shape of the Royal Seal of King Michael I of Romania — a cross formed by four letters 'M'. This cross was applied to the wings and also to the fuselage in the place previously occupied by the number, which was moved to the tail at this stage. The cross applied to the ARR Hurricanes was the 'stencil type'. Also, the squadron badge of the 53rd Squadron, a Mickey Mouse on horseback, was painted on the fuselage between the cockpit and the cross. The camouflage remained the same.

It must be noted that at some stage, each of the propeller blades was decorated with red and white stripes, as evidenced by the photos. The purpose of these stripes is unclear, but they appear to be simply a visual warning. Many photos of ARR Hurricanes depicting these variations in camouflage and details have been published. My model was based on a photo of Hurricane Yellow 1 published on page 9 of *Rumanian Aces of World War 2*.

I painted the model with Lifecolor Acrylic paints sprayed with an Iwata HP-CS Airbrush. The painting was quite complex because of the many colours involved. After the flap bays were painted RAF Interior Green-Grey and masked, I painted the underside of the left wing white followed by the yellow wingtips. The entire white segment and the yellow wingtip of the right wing were masked next (Photo 77) and the right wing underside was painted black. The contraption that you see attached to the nose of the model in that photo is a stand that I made from a coat hanger. Its purpose is to minimise as much as possible the amount of contact the model can make with anything around it during painting (thus eliminating dust, lint and fingerprints from the paintwork). Then the wing was masked and the fuselage underside was painted Aluminium. (Photo 78). The underside was then masked (Photo 79) and the uppersurfaces were painted RAF Dark Earth. The Dark Earth areas of the camouflage were masked with Blu-Tack and paper and the RAF Dark Green sprayed next (Photo





80). I thought that it would be interesting to simulate somehow the areas where the previous markings were overpainted. Circular masks were cut from Tamiya tape and applied to the wings along with the masks for the wing bands. (Photo 81). The yellow fuselage band and nose were masked and the entire model was protected against overspray. Before I sprayed the yellow paint, I sprayed the areas with a white basecoat (Photo 82). The yellow fuselage band was painted in such a way as to show where the earlier narrower band has been widened with a fresh coat of paint. The many other smaller parts such as propeller, flaps, tailplanes and radiator were masked and painted in the same manner.

The entire model was then covered with a couple of coats of Johnson's Klear in order to obtain a glossy-smooth bed for the decals (Photo 83). The decals were designed with a graphic software called Deneba Canvas 7, which is quite basic but easy to use. Any graphic software could be used for designing decals, but I just find this one easier to wield. The decals were printed with an OKI DP5000 printer on Tango Papa decal paper. The 'mounted Mickey Mouse' emblem was printed with an Epson Stylus C86 on Papilio decal paper for inkjet printers (the white background was still printed with the Oki printer). I had to use a different printer because the Oki does not deliver a very good brown colour. The only drawback of this process is that the Papilio decal film is quite thick, otherwise the print is excellent. The decals were applied as

usual with the help of Aeromaster decal softener. After the decals dried thoroughly, I wiped the entire model with a moist cloth in order to remove all residue, then sprayed with a couple of coats of my own satin cocktail — a mixture of Klear to which I added 20% Tamiya matt paste.

The other parts such as the landing gear, tailplanes, antenna mast, landing lights and exhausts were now added. The exhausts were first painted matt black then lightly drybrushed with steel and finally dusted with rust chalk pastel powder (Photo 84). The canopy panel lines were simulated with strips of decal (Photo 85). A piece of blank decal sheet was first sprayed RAF Interior Green Grey then sprayed Dark Green. The strips were applied as usual and after they were thoroughly dry, the canopy was dipped into Johnson's Klear, which sealed them in and gave the canopy a very polished look. The three disks visible in the photo are meant to simulate the hinge bolts of the opening panel — they were cut with a punch-and-die set.

The model was weathered lightly with chalk pastel dust and a light spray of very diluted black paint along the panel lines. The exhaust stains were sprayed with a dusting of very dilute matt grey. The antenna wire was made from thin black Nylon mending thread. The propeller was fitted last and the model went into the display cabinet.

Final word

I really enjoyed building this model. It took eight months (minus a month-and-a-half spent on holidays) to

complete, but what fantastic months they were! My work-in-progress was displayed on the Internet and the support I received was tremendous — thanks to everyone. This gave me the opportunity to make the acquaintance of historians, enthusiasts and craftsmen who did their best to help me in my research and with advice.

In the end, I think that the consensus in relation to the Revell Hurricane was "There is still life in the old dog yet".

Radu Brinzan

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*Arthur Bentley's exquisite Hurricane drawings were published in the November 2005 issue of our sister publication *Model Aircraft Monthly*.

1/72nd Scale

Manufactured by



The [Sea] Owl and the Pussycat

Mike Williams upgrades the 1/72 Airfix Westland Lynx Royal Navy helicopter

After a choice on the Airfix Navy Lynx was made on the airfix.com web forums for the next group build, I quickly snapped one up off eBay. I hadn't built a helicopter for as long as I could remember so it seemed like a good opportunity.

After scouring the net with Google for lots of information and inspiration, I found a photo of the Royal Navy Lynx HMA Mk 8 in a hangar with the tail and main rotors folded back and the cockpit and cabin doors opened up. With its main rotor foldback stay rods and *Remove Before Flight* tags it was the inspiration I needed, so I ordered the Airwaves detail set from Hannants and got started.

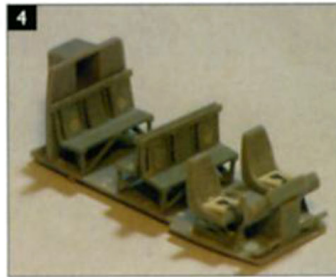
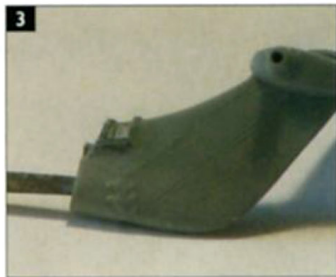
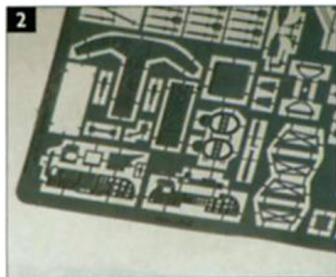
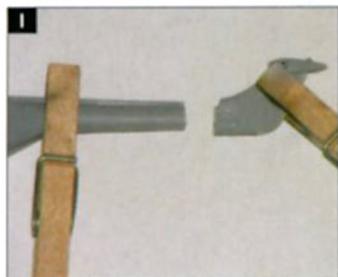
The first step was to dry-fit the fuselage halves and determine whereabouts the fold in the tail section actually is. I held it together with clothes pegs, got the razor saw out and took the plunge, cutting on the softly moulded detail of the fold line (Photo 1). I then needed to detail the interior parts of these areas, so after a good search on the net and some helpful people on the www.aircraftsourcecenter.com

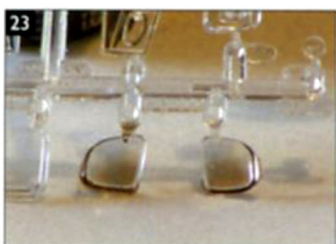
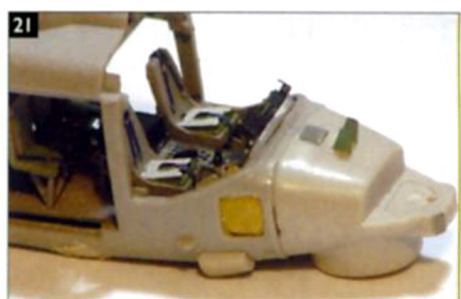
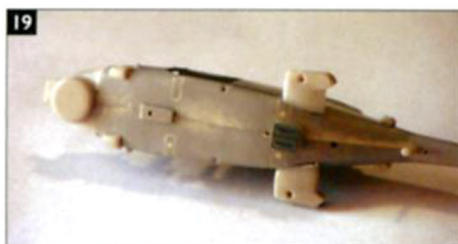
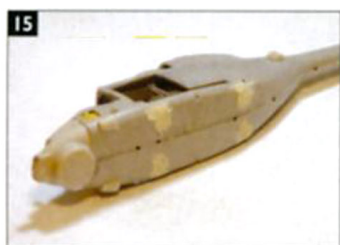
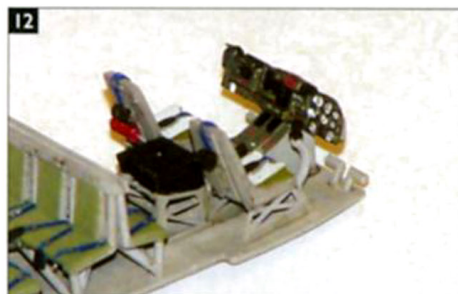
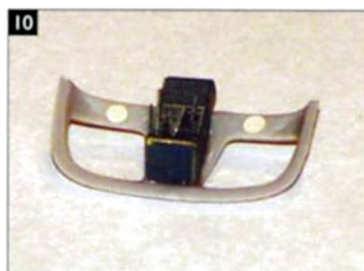
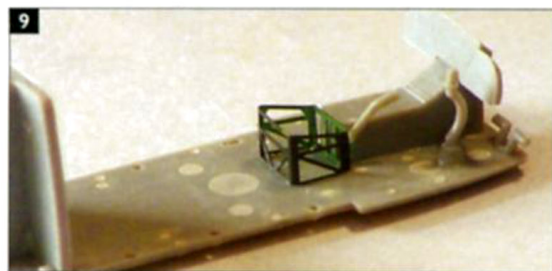
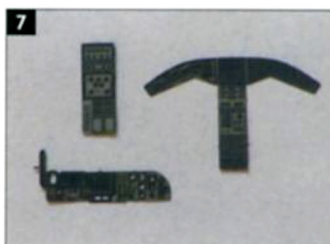
chatroom I got the photos I needed. The main panel detail is included in the Airwaves detail set (Photo 2), but it also needed some additional detail for the hydraulic cables. I used fine copper wire and fuse wire for these. I also thinned out the rotor gearing housing and fixed some fine ribbon I got from a florist to simulate its mesh cover (Photo 3). Framed with some etched fret 'sprue' it looked right in this small scale when dry-brushed with dark grey when I had nearly finished the model.

Onto the cockpit and cabin interior. In the kit there is a large inflatable seat that takes up the interior of the main cabin. There is an alternative seating arrangement however that has the tubular-frame seats that are the same as those on the Army Lynx. I decided to use these instead of the inflatable seating unit, drilling out the lightening holes in the backrests and adding the seats to the cabin floor after I had filled and sanded the ejector pin marks (Photo 4). I used the Airwaves etched parts for the pilots' seats' legs, and added the metal frame structure to their backs from etched parts from my spares box as well as

adding the fire extinguisher and seatbelt retraction cans on the back of the pilots' seats from scrap sprue (Photo 5). The raised instrument details were removed from the kit's cockpit panels to allow the Airwaves parts to go onto a flat surface (Photo 6). To paint the etched instrument panel I used a new technique that I found in the 'Tips' section on www.aircraftsourcecenter.com. First, I painted it with dark grey acrylic, then coated with clear acrylic (Future/Klear floor polish works well), followed by light grey enamel. When this had dried for about an hour I wiped the panel over using a clean cotton cloth that had been dampened with white spirit. This removed the enamel from the raised parts of the etched surface leaving the recessed parts in the light grey and the raised parts in the dark grey which was protected from the white spirit by the acrylic clear coat (Photo 7). When all this was dry the details on the dials were added by painting with a fine brush and a toothpick.

I next added a scratchbuilt collective lever and the cyclic pitch control from the kit. I omitted the





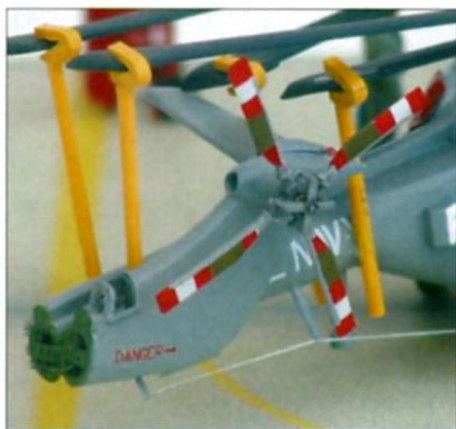
controls from the co-pilot's side as these are not always present (Photo 8). The etched avionics console stand and a scratchbuilt avionics box were added to the rear of the centre instrument panel console, as well as the overhead console and various levers and switches (Photos 9 & 10). When all detail painting had been done I fixed all the cockpit components together and added seatbelts from the Airwaves set (Photos 11 & 12). This was the most time-consuming part of the entire build.

Now I could get on with assembly. First, I needed to fill and sand the ejector pin marks in the interior of the fuselage halves (Photo 13), then I corrected the shape of the square footlight windows from the kit's lozenge shape which is based on the prototype Lynx and wrong for a production variant. These were masked from the inside for painting and later filling with Kristal Klear. Next the cockpit section and roof sections were added to the fuselage halves and the two halves were joined together, following which the new nose sections were added to the fuselage with the relevant parts for the HMA Mk 8 (four possible different marks of Lynx can be built from this kit). This was a bad fit and needed a fair bit of filler and sanding to blend it in (Photo 14).



There was quite a step between on the underside of the fuselage halves that needed to be built up with filler and then wet sanded, along with the holes for the skids if the Army version is built (Photo 15 - Airfix make both Army and Navy versions of the Lynx which share some common parts and sprues).

Onto the main and tail rotors. In order to depict the main rotors in the stowed position I needed to scratchbuild the main rotor stays from styrene rod glued to some small parts from my spares box (Photo 16). I glued the blades to the main rotor hub and made sure they were all properly aligned at 90° before slicing them off at the fold line with a scalpel blade. Next I raided my accumulation of spare etched brass for some suitable parts for the fold mechanism and found them among leftovers from a set for a Tiger



tank, of all things! (Photos 17 & 18).

After gluing these in place I painted the main rotor hub light grey and when dry I gave it a wash of thinned Tamiya smoke. The tail rotor was assembled as per the kit, painted with various colours and also given a smoke wash.

Next job was to mask up the transparencies and fit them to the main fuselage and the cabin sliding doors. No problems there. I added the wheel sponsons and the various antennae from the kit and the Airwaves set under the tailboom area, drilled out the recesses for the tie-down hooks on the sponsons and added the etched hooks (Photos 19, 20 & 21).

Next came the Sea Owl passive ID sensor for the nose. The hole for it was too far aft so I filled it and drilled out a new one that would enable it to turn.

The details were a little soft on this part so I drilled out the rivet holes to enhance the detail (Photos 22).

I then added the cockpit roof with the roof light windows masked up after I had tinted them with Tamiya smoke (Photo 23). The fit of this part was terrible to say the least, but nothing that a bit of filler and patience with wet 'n' dry didn't solve. After painting the interiors of the cockpit doors I fitted them with white glue to permit spraying without paint getting inside the cockpit area. I added all the various 'lumps and bumps' such as exhaust outlets and the intakes using foil from a scalpel blade pack, and prepared to start spraying.

Painting was easy – all one colour, Medium Sea Grey. I used Humbrol enamel as it sprays wonderfully well when thinned with cellulose (lacquer) thinner (Photo 24).

Whilst the paint was drying I got on with the undercarriage. Now here I hit a problem. If built out of the box the Airfix kit's undercarriage gives the Lynx a very odd stance, almost as if the undercarriage is moulded for 'in flight' configuration, so I shortened each oleo by 1mm and added etched scissors links. I painted the wheels with tank grey for the tyres and white for the hubs and main legs, with a thinned smoke wash for these too.

Decals for the main airframe were fine out of the box with the exception of the national insignia, which were out of register and too dark, so I found alternatives on an old *Desert Storm* Tornado sheet (Photo 25).

I hand-painted the FOD covers by hand with Humbrol red enamel and when dry also gave these a wash to add depth and tone down the colour. After unmasking the glazed areas I added the final details, main rotors, stay rods and tail rotor fold details. Various *Remove Before Flight* tags came from an old Verlinden sheet, then I added the UHF aerial wire from Aeroclub rigging thread, attached the main undercarriage, painted the flotation aids green and the sensor covers white, made a *RBF* cover for the Sea Owl sensor, fixed the cabin and cockpit doors open...and it was almost finished. I made a helipad display base and added an airfield fire extinguisher and a crewmember to finish it off.

I am very pleased with the model and really enjoyed turning the quite basic Airfix kit into something a little bit special.

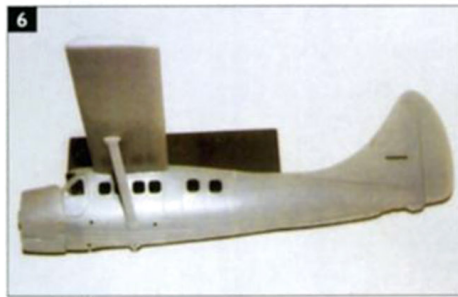
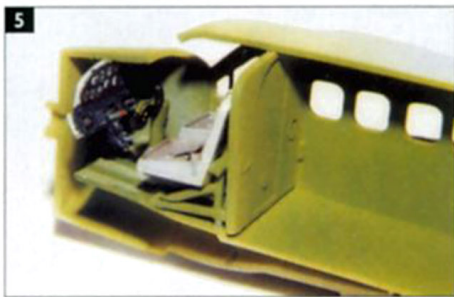
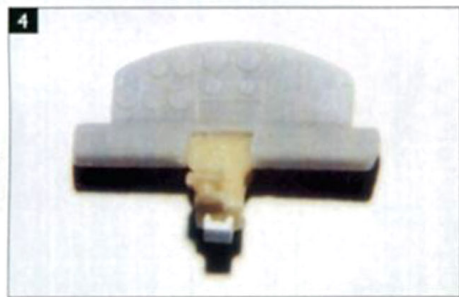
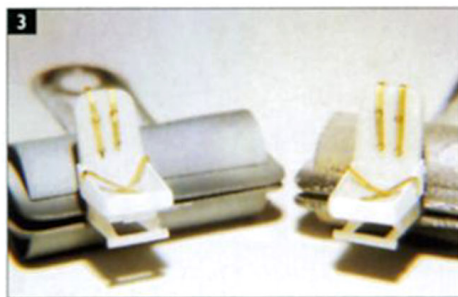
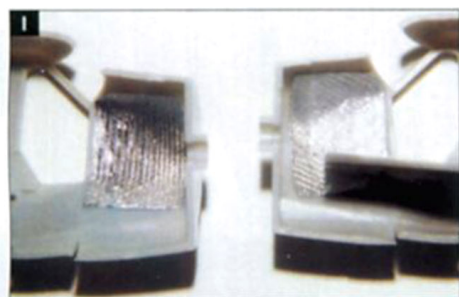
Mike Williams





Landlocked Otter

De Havilland Canada's venerable workhorse has served the world over on wheels floats and skis. Frank T Cuden models an Otter that spent its early life in the icy wastes of Antarctica



Unlike the sea otter and otter that spend most of their time cavorting about in water, the de Havilland Canada DHC-3 Otter that I chose to build from the Hobbcraft 1/72 kit spent most of its time operating from land, specifically McMurdo Sound, Antarctica. There, this Otter was flown from 1956-66 by the US Navy's VX-6 squadron during Operation Deep Freeze.

A few years ago, Max Decals issued sheet No 7207 Polar Aviation Pt 1 for the Otter (also available in 1/48 scale. Ed.). I ordered a set as I had the Hobbcraft kit on my 'to be built' shelf. I really don't know what inspired me to build it at this time other than that I was looking for a relatively simple build, and the Otter, with no wheel wells and no elaborate cockpit, fitted the bill. As it turned out, the majority of my time was spent on the paint scheme.

I determined from research that the Otter's cockpit walls were covered with pleated material for warmth and sound deadening. Using candy wrapper foil, I lightly scored the pleated pattern onto the foil and glued it to the area forward of the cockpit doors using

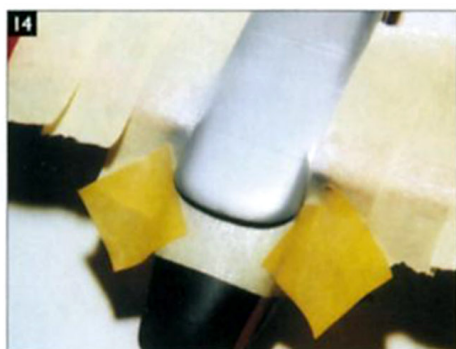
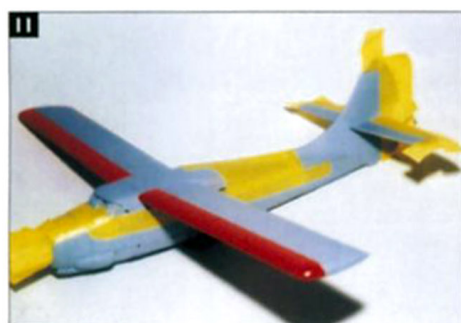
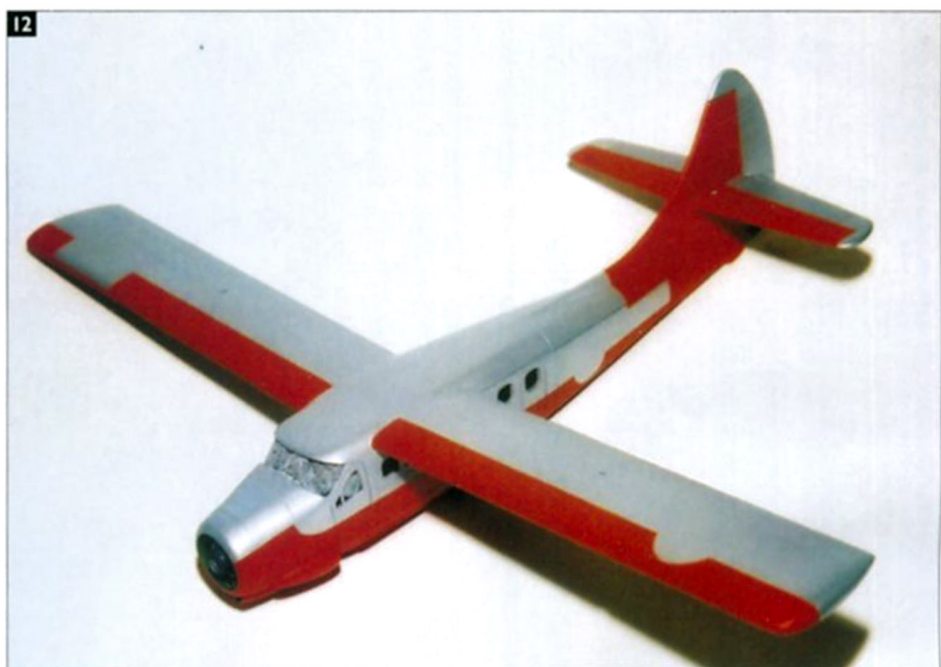
white glue (Photo 1). In retrospect, I could have done without the pleated candy wrapper material as not much was visible when the two fuselage halves were joined. Live and learn!

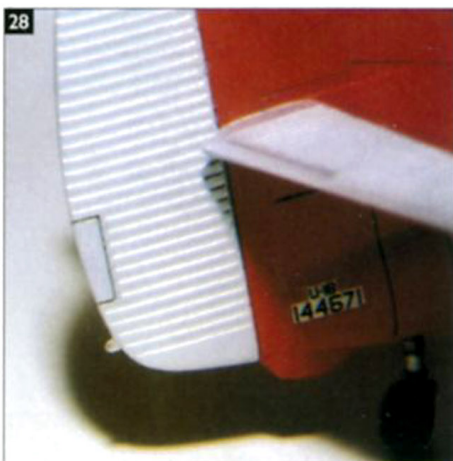
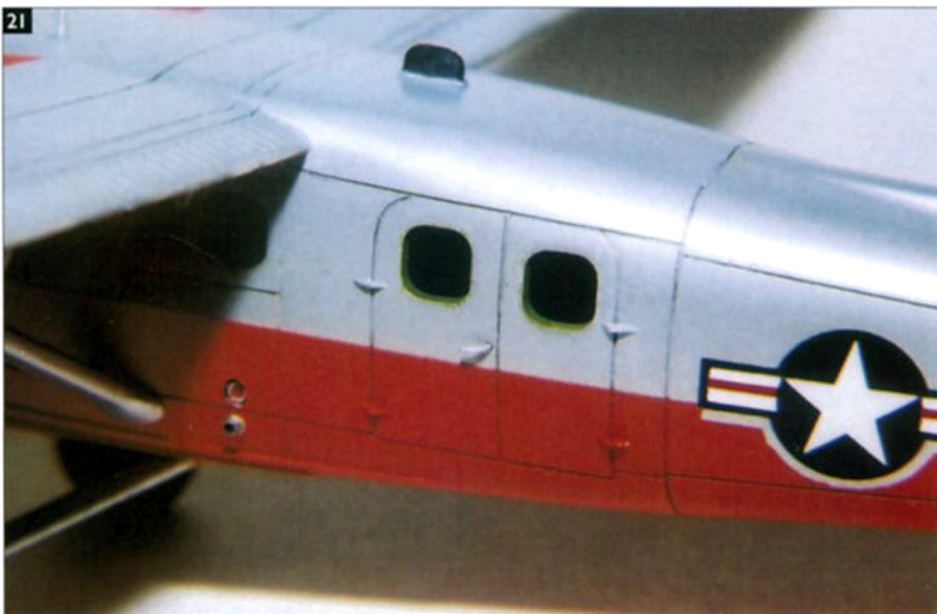
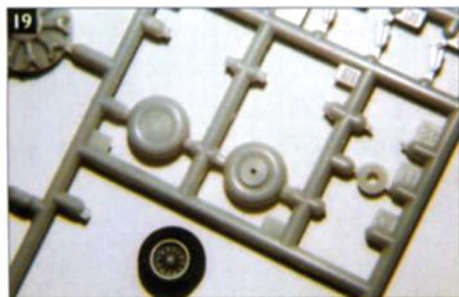
I reworked the kit seats, which were rather large and almost out of scale, making mountings from small plastic rod and adding etched belts and harnesses (Photos 2 & 3). Only later did I discover in my parts bin a couple of similar seats that were more in scale, but by that time it was too late.

The instrument panel provided in the kit is not accurate, so having a spare 1/72 scale P-51 Mustang resin panel I notched the kit item and added a centre console from the Mustang part (Photo 4). The kit's instrument faces are raised, so I simply applied ReHeat individual instrument decals after painting the panel black and adding white circles where the instruments would go. I used Testor's Interior Green for the fuselage walls. If not shortened, the 'throwover' control wheel would have stuck outside the port door, it was that big! A little cutting here and there and the part fitted within the confines of the cockpit (Photo 5).

The Otter has some dihedral to its wings and I knew that if I didn't figure something out, the chances were pretty good that both wings would not line-up. After gluing the fuselage halves together I used the wing-to-fuselage bracing struts as spacers when gluing on the wings (Photo 6). When everything was dry I removed the struts, thus assuring the proper dihedral. Filling the gaps between wing and fuselage on both the top and bottom was a lot easier without those struts in the way (Photo 7). Not much filler was needed along any of the fuselage seams, and I congratulate Hobbcraft for their engineering on the components of this kit.

Choosing not to use the kit-provided engine (Photo 8), I ordered a Pratt & Whitney R-1340-AN-3 Wasp nine-cylinder geared engine from Engines 'N' Things. The 600 hp R-1340 was used not only for the Otter but also for the Commonwealth Wirraway, Martin F3M-1 and Curtiss O-52, among others. The basic Engines 'N' Things item was a good starting point, to which I added spark plugs and wires using fine solder and little pieces of plastic to represent the plugs. An oil sump was fashioned from plastic. Photos of the actual aircraft





showed what appeared to be individual moving doors in the lower chin intake, and as one showed one door open and one shut, I modelled it in that manner (Photo 9).

The cranked pitot tube as provided needed some work. I tapered the end, drilled a small hole in the forward tip, and superglued a tiny vane in place.

From reference photos I discovered the Otter had a landing light in the port wing leading-edge. After gluing the top and bottom wing halves together I filed a half-circle at the location of the light, vacformed a piece of clear plastic to the leading-edge's contour, then traced the diameter of the opening and later cut the 'lens' to fit (Photo 10).

Having first sprayed the tail unit's control surfaces with Floquil Old Silver, I masked these off and sprayed the wing leading-edges with International Orange,

reasoning that it would be far easier to mask those surfaces before applying the International Orange to the remainder of the fuselage. The 'Navy' title would appear on the aft centre fuselage sides and the rectangular masking tape extension reflects that (Photo 11).

With the International Orange colour coat complete (or so I thought! — Photo 12), after a little tricky masking had been accomplished to allow for silver borders around both the national insignia and the word 'Navy' on both fuselage and wings, I planned to move on. However, at this juncture enter the proverbial gremlin! Try as I might, I could not hide the fuselage seam over the cockpit. I used Milliput, Squadron White Putty, superglue, even typewriter correction fluid, all to no avail. You can readily see the offending seam in Photo 13, where typewriter correction fluid is visible,

as I had to rescribe a panel line. Subsequent putty applications also filled the panel line, so additional work was needed each time. About at my wits' end, I applied a couple of coats of superglue and miraculously, it worked (Photos 14 & 15).

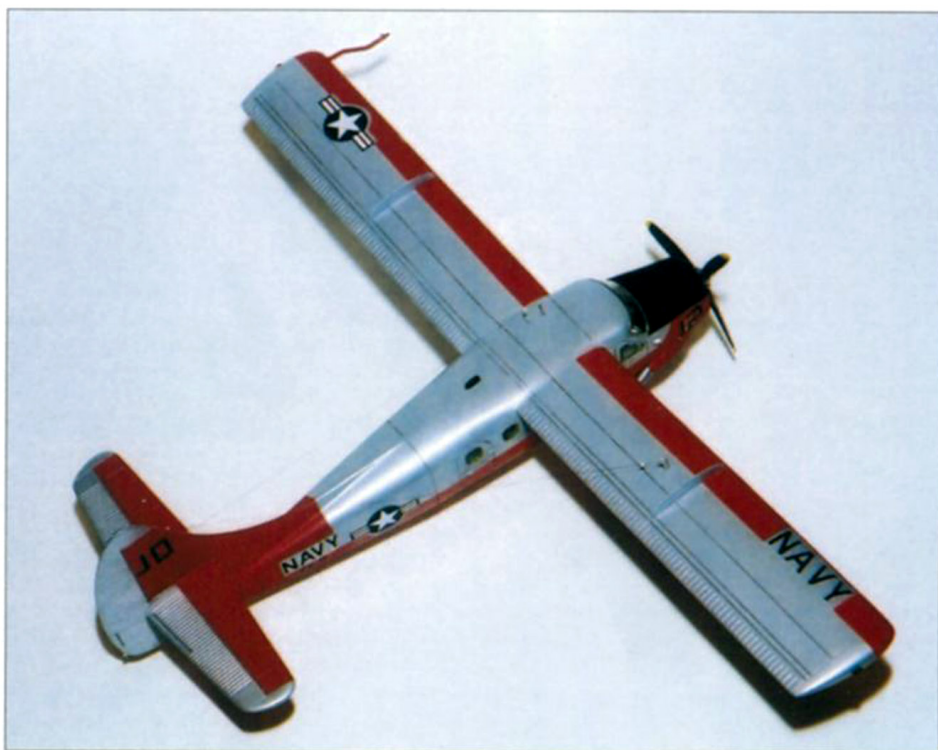
Although the cabin doors are provided as separate items and could be mounted open, I decided to close them and they fitted like gloves. The fairing under the anti-glare panel would later hold the twin exhaust pipes on both sides of the fuselage. I've added the landing gear and tailwheel and have also begun the decaling process in Photo 16. The wing fences were also added at that time. Attaching them prior to masking and painting would have made for additional work so I took the easy way out. Careful measuring ahead of time allowed me to obtain the thin oversized silver areas around the insignia and the word 'Navy'. For the insignia, I carefully cut out a circle from Tamiya masking tape using a template that was just a bit larger than the diameter of the star in the insignia. The mounted R-1340 engine can be seen in Photo 17. A small breather pipe is also in place on the starboard fuselage, just above the exhaust fairing. The pipe was fashioned from plastic tubing and the steps on the landing gear legs were made from sheet plastic, cut appropriately and glued to the legs. The fit of the gear struts to their mounting areas was not entirely to my liking, so a couple of applications of thinned white school glue faired everything together. The chin intake with one side closed can also be seen here.

The rather ragged curved line of the International Orange just below the anti-glare panel can readily be seen in Photo 18. Subsequent touch-up alleviated the problem. Note the serial number just below the starboard horizontal tail. Max Decals provides silver backing and serial number as separate decals so I didn't have to mask that section. Max also provided silver backing sheet for the national insignia, but the silver on the decal did not match Floquil old silver, hence my having to make stencils. Thankfully, the serial number silver backing decal was far enough away from the silver finish so as to not matter.

I wasn't entirely pleased with the kit-provided wheels, so a search through the spares box yielded suitable replacements which turned out to be more like standard Otter wheels (Photo 19).

In Photo 20 I've added the twin exhaust stacks, which were airbrushed with Model Master non-buffing aluminium. In reference photos I had they appeared rather shiny as compared to the dark brown/rust colour often seen on aircraft. One problem did arise with these exhaust stacks. Gluing in the landing gear legs prior to attaching the stacks necessitated that I shorten the stacks, as they would not fit with the legs in place. Try as I might, I simply could not jam them into the hole in the housing. They were also a very tight fit, so shortening them a bit allowed for easy attachment. Just behind the port wing strut a small breather pipe is visible. Again, I made that from plastic tubing and simply shoved it in place. Also note the gas tank caps which are more visible in this photo, as are the boarding steps on the gear leg.

My reference photos also revealed the door hinges and those for the starboard passenger door and the port cargo doors, with handle, have been fabricated and added in Photos 21 & 22. One of the aerial masts is also visible on the upper fuselage, made from stiff wire so it would take the tension of the soon-to-be-added aerial lead. The ADF antenna was made from sheet plastic, sanded, glued in place and painted flat black. Using Future (Klear) Floor Polish, I coated both the inside and outside of the windscreen, and once dry white-glued it in place. Going slowly and keeping a sharp point on a B-grade artist's drawing pencil, I accentuated the engraved panel lines, helping to break-up the overall silver and International Orange-painted areas. Photo 23 shows panel lines, canted tailwheel



and all decals in place. The port wing navigation light is shown in Photo 24. CMK make lights in the proper scale so it was a simple matter of slicing one off the sprue and gluing it in place on the wingtip.

I painted the propeller hub with chrome silver and used Floquil's reffer yellow for the tips and engine black on the blades. Logos and stencilling came from the Max Decals sheet (Photo 25).

Although they are barely visible, Photo 26 shows the Kristal Klear side windows have been applied. I normally overcoat dried Kristal Klear with clear gloss, but the windows looked fine as they turned out, so I left them as was. Adding the propeller made the model come to life. Note the additional antenna post just inside the starboard wing fence. The aircraft I was modelling had a rather unusual antenna arrangement and I wanted to duplicate it.

In Photo 27 I've added the cranked pitot tube and landing light on the port wing leading-edge. As luck would have it, the small cover I made for the MV lens vanished, so after installing the MV item I coated the depression with Kristal Klear and when dry you can see the light through the 'lens' of Kristal Klear. In Photo 28 I've added a tiny CMK clear bulb to the lower rudder.

This Otter's unique antenna arrangement is visible in the photos of the finished model. The uppermost wire led to the post on the centre forward fuselage, while the lower one went to a post just inside the wing

fence on the starboard wing. The two wires were connected just forward of the fin. Rather than use the ultra-thin fishing line for the connector and risk disfiguring the arrangement when applying heat to tension them, I stretched a piece of sprue to match the diameter of the fishing line. When cooled it was straight, so using white glue I laid it between the two previously installed wires and let the dabs of white glue act as insulators that were later painted white. There was also a very small wire just behind the fuselage post that ran from the antenna wire down to the upper fuselage. That wire was different in that it had a little curl to it, so I simply cut it just a bit longer than necessary. White gluing it to the antenna first and then to the upper fuselage gave me the curl I wanted.

And, just like that, the project was completed. I've said in these pages before that Hobbycraft are to be commended for kitting some of the important, albeit lesser-known, aircraft and the Otter fits nicely into that category. Construction was straightforward and other than some scaling-down of the control yolk, didn't offer any problems. I would highly recommend the kit to those wanting to model an important utility aircraft with a huge variety of potential colour schemes and configurations, military and civilian.

I hope you like the finished product as much as I do.

Frank T. Cuden

Book of the Month

USAAF Aircraft Markings and Camouflage 1941-47

by Robert D Archer and
Victor G Archer

Price: \$79.95
Publisher: Schiffer Publishing Ltd
ISBN: 0-7643-0246-9
Format: 310 mm x 230 mm, 350 pages
Cover: Hardback with dustjacket
Illustrations: Black-and-white and colour
photographs and colour artwork

If you were ever confused by the plethora of specifications, technical orders, colour charts and similar references which governed the finish of wartime American aircraft, you'll find this handsomely-produced (and heavy!) tome to be the Holy Grail at the rainbow's end. They're all in here, in strict date order, and with well-

researched comments by the author. There is some inevitable repetition, but a huge amount of information.

Here, for the first time, you will find colour illustrations (nicely rendered by Archer Jr) of the 12th AF's home-made Tunisian schemes; the full history of D-Day stripes; and a proper run-down on the colour standards, all interspersed with a generous selection of good clear photos, many in colour.

There are some 'buts' of course. The Tunisian scheme drawings and accompanying instructions disagree somewhat, which may be confusion at source — but if so, surely Archer Sr would have commented?

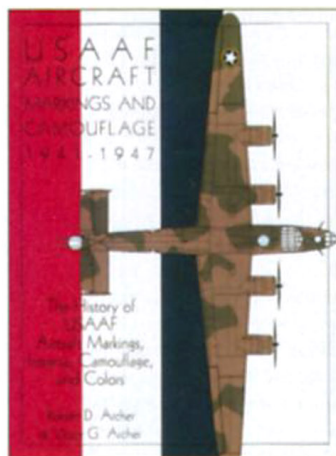
There are also some errors in photo

captions — the 'extra tank fitted' '+' marking on a P-51B is not a 'kill'! Many captions seem a bit obvious; maybe it was felt that 'note that...' would rapidly become tedious.

The colour chips are, alas, merely printed. It's inevitable economics, but it does reduce their credibility. For what it's worth, they show Olive Drab ANA 613 to be a little lighter and browner than OD41, and OD41 to be a little nearer green than brown. Also for what it's worth, the numerous colour photos show that OD41 can be anything from fully green to light tan!

My bookshelf's bursting, but this one's going in... somehow!

Brian Derbyshire



Bookshelf

USAF F-4 and F-105 MiG Killers of the Vietnam War

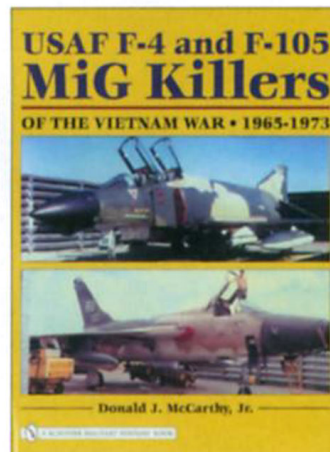
by Donald J McCarthy Jr

Price: £30.99
Publisher: Schiffer Publishing Ltd
ISBN: 0-7643-2256-7
Format: 235 mm x 298 mm, 192 pages
Cover: Hardback

This book is a well-researched history of all the USAF MiG killers during the Vietnam War. The first chapter starts by putting a strong case forward for a MiG kill to be credited to the F-100 Super Sabre. On 4 August 1965 a Super Sabre piloted by Capt Kilgus engaged a MiG-17 in aerial combat and was awarded a probable kill. Evidence that appeared after the war shows that a MiG-17 failed to return on that date, so it is almost certain that the F-100 and Capt Kilgus should also be awarded the honorific 'MiG killer' title.

The second chapter lists all the kills scored by F-4C/D/E Phantoms in numerical order by serial number, and also includes the unit assignment and crew details followed by a short description of the action, and the final fate of the airframe.

Chapter 3 supplies the same type of information on F-105s, but there are a lot fewer illustrations of surviving Thunderchiefs, which says



a lot about the high attrition rate for this type.

The appendices cover the aircraft and weapon combinations used in Vietnam and a listing of the USAF official combat credits, and finally colour illustrations and specifications of the three types of MiG used in Vietnam.

If the Vietnam War period is of interest to you this will be a useful addition to your library, and for the modeller the subject matter would make an interesting theme. Recommended.

David Francis

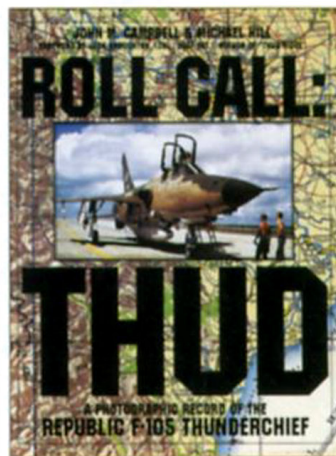
Roll Call: Thud

by John M Campbell and
Michael Hill

Price: £49.95
Publisher: Schiffer Publishing Ltd
ISBN: 0-7643-0062-8
Format: 235 mm x 298 mm, 176 pages
Cover: Hardback

The F-105 Thunderchief was the main bomber used by the USAF during the Vietnam War and this book is a tribute to the aircraft and pilots. It is unusual in that it is neither a technical nor aircraft history but a numerical record of all 833 Thunderchiefs and their eventual fates. In some ways this is makes very depressing reading, with over 60% of aircraft being lost to accidents or enemy action.

The book starts with an introduction by Colonel Jack Broughton, USAF (Ret) — he of *Thud Ridge* and *Going Downtown* fame — which sets the scene with a brief history of the aircraft. The main part of the book is a numerical listing of all the Thunderchiefs produced by airframe and serial number and includes a short history, including their eventual fates, but what sets this book apart is the authors' attempt to illustrate every single airframe with a period photograph in colour or black-and-white. This means that many of the photographs are from personal collections as well as official sources so the quality does vary quite widely, but



in many cases these poorer quality shots are the only ones in existence of a particular airframe, and the authors have managed to illustrate over 75% of Thunderchiefs produced.

The final section illustrates the colourful artworks applied to the aircraft. For the modeller this book supplies many examples of aircraft in day-to-day use, which can provide some inspiration for those building the Monogram or Trumpeter kits. If you are a Thunderchief enthusiast this is an essential purchase. It is also a fitting tribute to those many who flew the Thud in combat and never returned. Highly Recommended.

David Francis

Airliners of the 1970s

by Gerry Manning

Price: £18.99

Publisher: Midland Publishing

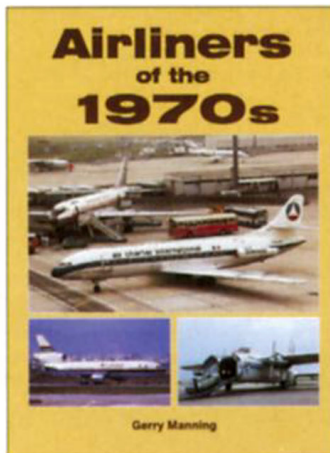
ISBN: 1-85780-213-6

Format: 280 mm x 215 mm, 144 pages

Cover: Softback

Although most things in the 1970s were vulgar and gaudy, two managed to escape the general encroachment of 'design' that has seen our public transport degenerate into a nausea-inspiring eyesore. Railway and civil aircraft liveries both maintained a pleasing and dignified appearance, despite the best efforts of the Philistines to bring them into line with a new age of decline.

In the case of airlines, we had the superlative BOAC design still gracing the likes of the VC 10, and Lufthansa's unforgettable yellow spot still adorned its fleet. Best of all, we still had BEA Tridents in the latter-day livery of that company that looked so smart, as well as a thousand other overseas operators all in variations on a similar theme (white with a stripe) differing only in subtleties of colour, tone and tail



Gerry Manning

markings.

This book illustrates the period beautifully, in colour throughout, and should be regarded as dangerous inasmuch that it stirs up those never-quite dormant longings in the modeller's breast to pick up a camera, nip off down to Leeds-Bradford Airport for the day, and go plane-spotting.

Quite simply inspiring.

GH

Battle Colours

Insignia and Aircraft Markings of the Eighth Air Force in World War II Vol I: Bomber Command

by Robert A Watkins

Price: \$45.00

Publisher: Schiffer Publishing Ltd

ISBN: 0-7643-1987-6

Format: 310 mm x 230 mm, 128 pages

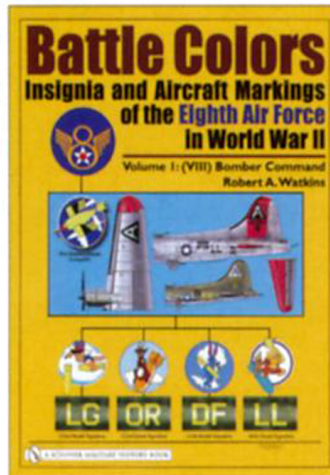
Cover: Hardback with dustjacket

Illustrations: Black-and-white photographs and colour artwork

This is a beautifully produced book: a one-man labour of love in glorious colour, providing an enormous amount of information about the 8th AF's bombers. After an introduction explaining how the system worked, and a brief history, we get charts of Group-in-Wing-in-Division identification markings and Squadron-in-Group lists.

The bulk of the book consists of a double-page spread for each Group, showing its bases, colours, codes, miscellaneous markings and squadron badges, all to a standard format, plus (usually) a photo or three. It's easy to use from a 'top-down' direction, though the index would benefit from an alphabetical list of squadron codes. There are some errors.

A number of squadron badges are unfamiliar, probably because they're so naff that no-one would choose or display them unless maudlin drunk. More seriously, the commentaries betray the fact that Mr Watkins simply doesn't know



his stuff all that well. Not only that, but he misuses lots of words and badly needs a copy of Eats, Shoots, and Leaves. (What did those poor, poor apostrophes ever do to him?)

Excellent effort. Lovely book. Fair reference. Shame about the grammar.

Brian Derbyshire

Modelling the F4U Corsair

by Brett Green

Price: £12.99

Publisher: Osprey Publishing

ISBN: 1-84176-880-4

Format: 248 mm x 184 mm, 80 pages

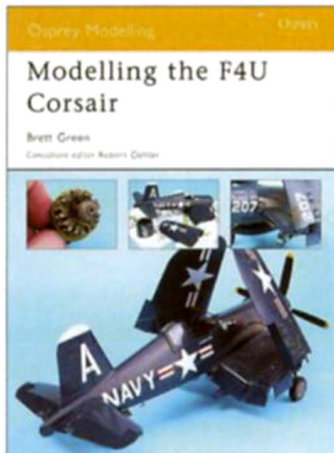
Cover: Softback

Illustrations: Colour photographs and artwork

The Corsair was one of the most successful fighters WW2 and examples remained in service until the 1970s. There have been many kits of the Corsair over the years and quite a few books about its history. This new title is specifically aimed at the modeller and starts with a short rundown on the main differences between the different variants and a description of the kits available in the three major scales.

The next chapter supplies a selection of close-up photographs illustrating areas of interest to the modeller such as the wingfold and engine. We then move on to the main meat of the book, which features a number of modelling projects:

- Trumpeter 1/32 F4U-1 backdated to a 'Birdcage' model.
- Tamiya 1/72 F4U-1A.
- Hobbypart 1/48 Corsair modified to a Fleet Air Arm Mk II.
- Tamiya 'Prop Action' 1/48 Corsair in El Salvador colours.
- Tamiya 1/48 F4U-1A converted to -4 using CMK resin conversion.
- High Planes 1/72 F4U-5N in



Korean War markings.

- Hasegawa 1/48 French Navy F4U-7.

The book ends with a list of modelling-related websites and books devoted to the Corsair, and finally a small selection of colour samples used on the Corsair with FS numbers and a brief description.

The book is well written and avoids the trap that many 'how-to' manuals fall into by including items that are of interest to the more experienced modeller as well as the novice. What makes this book such a good investment is that many of the modelling techniques described can be used on subjects other than the Corsair.

David Francis

Spitfires and Yellow Tail Mustangs

by Tom Ivie and Paul Ludwig

Publisher: Hikoki

Price: £29.95

ISBN: 1-902109-43-0

Format: 297 mm x 210 mm, 176 pages

Cover: Hardback

The USAAF 52nd Fighter Group enjoyed an outstanding record in World War II, but to date its story has never been told. Activated in January 1941, it moved to England in July 1942 and flew combat missions in Spitfires as part of the 8th Air Force before being reassigned to Operation Torch in November 1942. After moving to North Africa it was assigned to the 12th Air Force and was again equipped with Spitfires. As part of the 12th Air Force it flew combat missions in the Tunisian campaign, and during the invasion of Sicily. In mid-1944 the 52nd was reassigned to the 15th Air Force and converted to P-51 Mustangs. During the remainder of the war it flew bomber escort and strafing missions to targets in Italy, France, Germany, Czechoslovakia, Austria, Hungary, Rumania, and Yugoslavia.



For its outstanding service the Group was twice awarded the Distinguished Unit Citation. During its long campaign the Group destroyed more than 425 enemy aircraft in aerial combat and damaged 135 plus many more on the ground. The 52nd Fighter Group produced 21 Aces. This book tells the story in style. Highly recommended.

Martin Athelstan

Warpaint Series – No 53, 54 & 56

Following the now traditional format, these latest three volumes are as useful, practical, and occasionally frustrating as their predecessors. The profiles and the photographs are all there, and you know that somewhere in the text is that crucial little bit of data you have been searching for. All you really lack is the kind of index that could drop you there in an instant. With

by Alan W Hall

Warpaint Series No 53
Avro Anson Mk I to 22
Price: £11.50
Publisher: Warpaint
Books Ltd



an aircraft like the Anson I would regard it as essential.

This whinge aside, these books

by Alan W Hall

Warpaint Series No 54
Westland Whirlwind
Price: £9.95
Publisher: Warpaint
Books Ltd



are excellent and well deserving of a place on any modeller's shelf, where they take up far less space than

by Tony Buttler

Warpaint Series No 56
Blackburn Firebrand
Price: £11.50
Publisher: Warpaint
Books Ltd



many less deserving titles.
Do the Skua next...

GH

Loach! The Story of the H-6/Model 500 Helicopter

by Wayne Mutza

Price: £16.82
Publisher: Schiffer Publishing Ltd
ISBN: 0-7643-2343-1
Format: 280 mm x 215 mm, 144 pages
Cover: Softback



For all its diminutive appearance, the Loach has a significant combat record, and Wayne Mutza does the helicopter justice in this well-written, superbly detailed, and lavishly illustrated volume. Much of the OH-6A's combat record in Vietnam is told in first-hand accounts, and fascinating insights are offered into the helicopter's controversial beginning, its development, and its service with the Army National Guard, the Army's flight demonstration team, worldwide operators, and law enforcement agencies. With one particularly interesting chapter devoted to the Little Birds of Special

Operations, the book is topped off with appendices featuring factual data, and more than 60 unit emblems.

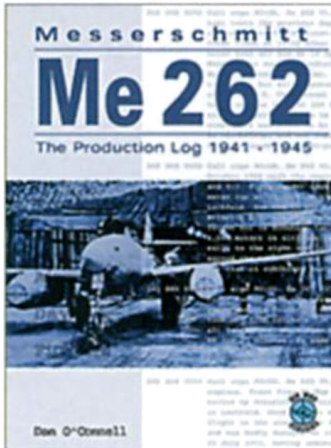
Probably the only book you will ever need about this dynamic little machine.

Barry Brine

Messerschmitt Me 262 The production Log 1941-45

by Dan O'Connell

Price: £35
Publisher: Ian Allan Publishing
ISBN: 1-90322-359-8
Format: 303 mm x 226 mm, 224 pages
Cover: Softback



It is sometimes astonishing to consider the sheer amount of material produced by the belligerents in World War II. Production figures are not usually the first concern of modellers, and thus it came as a surprise to learn that there were no fewer than 1,500 Me 262s produced, and believe it or not, this chap has found details of 1,300 of them!

Starting with an overview of *Werknummer*, the bulk of the book is — as might be expected — a number-by-number biography of each aircraft in as great a detail as has been possible. Some warrant little more than a line, while others have generated great swathes of data.

There are plenty of photographs,

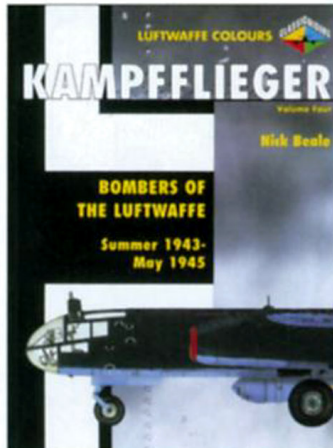
but on the whole this book is more of an historical work than a modeller's reference — but then, how many of us actually get round to building anything these days, eh? Me, I'm just building a library at the moment. This will be in it!

GH

Luftwaffe Colours — Kampfflieger Vol 4 Bombers of the Luftwaffe Summer 1943-May 1945

by Nick Beale

Price: £16.99
Publisher: Classic/Ian Allan Publishing Ltd
ISBN: 1-90322-350-4
Format: A4, 96 pages
Cover: Softback



This is the last in this series of four volumes forming a comprehensive pictorial encyclopaedia of the aircraft and markings of the Luftwaffe bomber force in World War II. This one examines the changing composition and tactics of Luftwaffe bomber squadrons as defence of the Reich and the ability to maintain its means of production became all-important.

Photographs accompany all the artwork profiles in this series, and it is the hands-on design of the book that will make it of such practical use for modellers, who will be able to switch between artwork and photograph at will, the better to make their own deductions rather

than rely upon the interpretation of some faceless author.

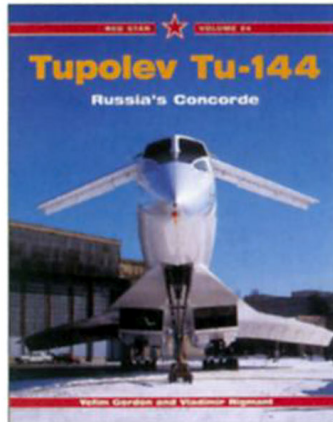
With 161 black-and-white and 12 colour photographs, as well as the profiles, this book has a wealth of useful data crammed into its well-designed pages.

Barry Brine

Redstar 24: Tupolev Tu-144 Russia's Concorde

by Yefim Gordon, Vladimir Rigmant and Dmitry Komissarov

Price: £19.99
Publisher: Midland Publishing
ISBN: 1-85780-216-0
Format: 280 mm x 215 mm, 128 pages
Cover: Softback



I have in my mind's eye an image of the perfect aviation library, in which all the volumes are identical in shape, size and format, and in which there is a single volume covering each aircraft type — even the Spitfire, Me 109 and the P-51. They would line the walls of the room in alphabetical order, and there would never be any doubt about where I needed to go in the event of a sudden emergency concerning, say, the Koolhoven 51. I would simply go to the third shelf down, to the left of the window, and there it would be, in a neat half-inch thick paperback bursting with diagrams, historical data, general arrangement drawings,

and wild assumptions about various aspects of its colour schemes inferred from shaky evidence by over-enthusiastic researchers.

They would all look like this book. It has everything. It is the only book on the Tu-144 that you will ever need.

GH



VA-82 CVW-8, USS Nimitz 1978



VA-192 CVW-11, USS Kitty Hawk 1972

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● Me 262 A-1a	ref TM2236	£29.95 RRP



Feedback

Letter of the Month Competition



Revell UK are offering a monthly prize for Readers' Letter of the Month.

Figure it out

Letter of the month

Dear Sir,

Another bumper mag! Good stuff, although I'm slightly bemused by the level of excitement over (the Airfix) TSR.2. Just buy a Trumpeter Vigilante, glue a set of Phantom wings on upside down, and hey presto! Having said that, of course I'm going to get one (given the opportunity!).

I'm actually in touch over your interesting Editorial 'Reality check'. Most of my models are built with little consideration to any particular state of rest of an aircraft, and you are absolutely correct in pointing out these facts. One thing you barely mention, though, is the inclusion of figures. Most expert modellers seem to prefer to leave the cockpit empty and incredibly detailed, although this in itself can be a minor error, unless the aircraft is suitably chocked and 'safed'. If an aircraft is to be represented armed and ready to go, with no control or undercarriage locks, no intake covers, no 'noddy' caps, safing wires or fabric warning tapes, then the crew must be

present. An ex-RAF armourer told me that they warned aircrew to never pull off the yellow protective caps from Sidewinder missiles before the aircraft was electrically powered up because the slave seeker head was held on magnetically, and nudging the missile head could cause the infrared seeker to fall off the gimball mount, making the AIM-9 unserviceable!

As you may gather, I stick the crew in, albeit with considerable modification to those (rarely) supplied. Following a magazine appeal some years ago, I now have enough figures to last me, but I just thought that I'd mention the slightly strange fact that there are aircraft modellers and figure modellers, but they seem to be two completely separate disciplines.

Keep up the good work.

Geoff Pike

via email

Congratulations to this month's winner of the Revell 'Letter of the Month Competition'. Geoff receives a Revell Air Brush Set.

Hs 129 scrutinised

Dear Sir,

Further to Steve Evans' build of Oberleutnant (I/Lt) Rudolf-Heinz Ruffer's Hs 129B-2 Red J (*Werkenummer* 0364) (8.(Pz.)/Sch.G.1), I would like to make four points regarding its markings:

1. The Gruppe bar is oversized, as mentioned. Whether the other fuselage markings are too large is open to debate, although, as noted by Steve, they do appear to be slightly oversized (*Squadron/Signal Publications Aircraft Number 176, Henschel Hs 129 in Action*, p.39, top left photograph);

2. There should be a yellow/white 87 (or B4) octane triangle marking behind the canopy on the port (and starboard?) fuselage side (ditto reference);

Send Your Letters To...

Please send your comments, questions and feedback to the editorial address, clearly marked 'Feedback'.

Readers' Feedback

The views expressed in this column are not necessarily those of SAM Publications. Reader's address details must be supplied but we will only publish them if the letter is considered to be a request for assistance or further correspondence from the readership.

This page will be used to publish letters we receive from the readership that relate to articles previously published in this magazine. These letters will add to, update or revise such articles.

3. The kill markings on the rudder of the Hasegawa model show two columns of seven and six tank 'kill' markings; the artwork on the rear cover of *Squadron/Signal* publication shows a single column of eight tank 'kills', and the photograph on p.39, although inconclusive, may possibly show a single column of eight 'kills'. Oberleutnant Ruffer appears to have flown other Hs 129s, including Red G, White J (*Werkenummer* 141749), and a photograph of Ruffer together with



Red ? - markings and *Werkenummer* are not visible) shows a column of 10 (?) tank 'kill' markings and a second column of three tank 'kill' markings. Is



Hunter wear and tear

Dear Sir,

I enclose a picture of a 66 Squadron Hunter F.6 taken in 1960, shortly before the squadron's disbandment, to compare with the model photo in November's 'Feedback'. Note the presentation of the squadron markings and the 'refreshed' roundel compared with the worn fin flash and aerial patch at the top of the fin, also the individual letter (in white). XF519 is typical of Hunters

at this time; at Bassingbourn we saw a lot of them since we were a diversion airfield for Duxford (64 and 65 Sqn) and Waterbeach (25 and 56 Sqn), but to receive a 66 Sqn aircraft from deepest Yorkshire was a bit exotic!

Thanks for great magazine.

Robbie Gibson

Sutton Coldfield Model Makers Society

via e-mail

Modelling harmony

Dear Sir,

I was interested in reading Mal Mayfield's letter about female modellers (*SAMI*, December 2005). I have been modelling since I was about seven; I'm now 38. I too hate the blokey attitude towards modelling — the 'wifey', hiding kits, and anything else that makes women seem tyrannical. My partner also does modelling, something we enjoy together most evenings, and I don't have that attitude about him spending money on kits — I get a lot of them for him too! I mainly make JG27 aircraft, trainers, ETPS, Royal Navy and US Navy and WWI aeroplanes

(whatever I find pretty!).

I'm not too happy about those Eduard adverts. They are blatantly sexist and don't really do the product justice. I wish you would remove the offensive ads from your publication. They are not funny or indeed clever.

One other thing, I think I'm the first UK female member on Armorama, I joined in November as 'Panzergrill', so if any SAMI reader members want to make contact, feel free to drop us a line.

Fiona Natalie Holden

via email

painted (from front to rear) RLM23 red, white, and black, not green — same reference, p.39.

Incidentally, the artwork on the back cover of the *Squadron/Signal* publication shows Red J (*Werkenummer* 0364) having the fuselage cross with a black infill and white outline, whereas the photograph on p.39 clearly shows just the white outline with the infill being the underlying RLM71 (?) camouflage.

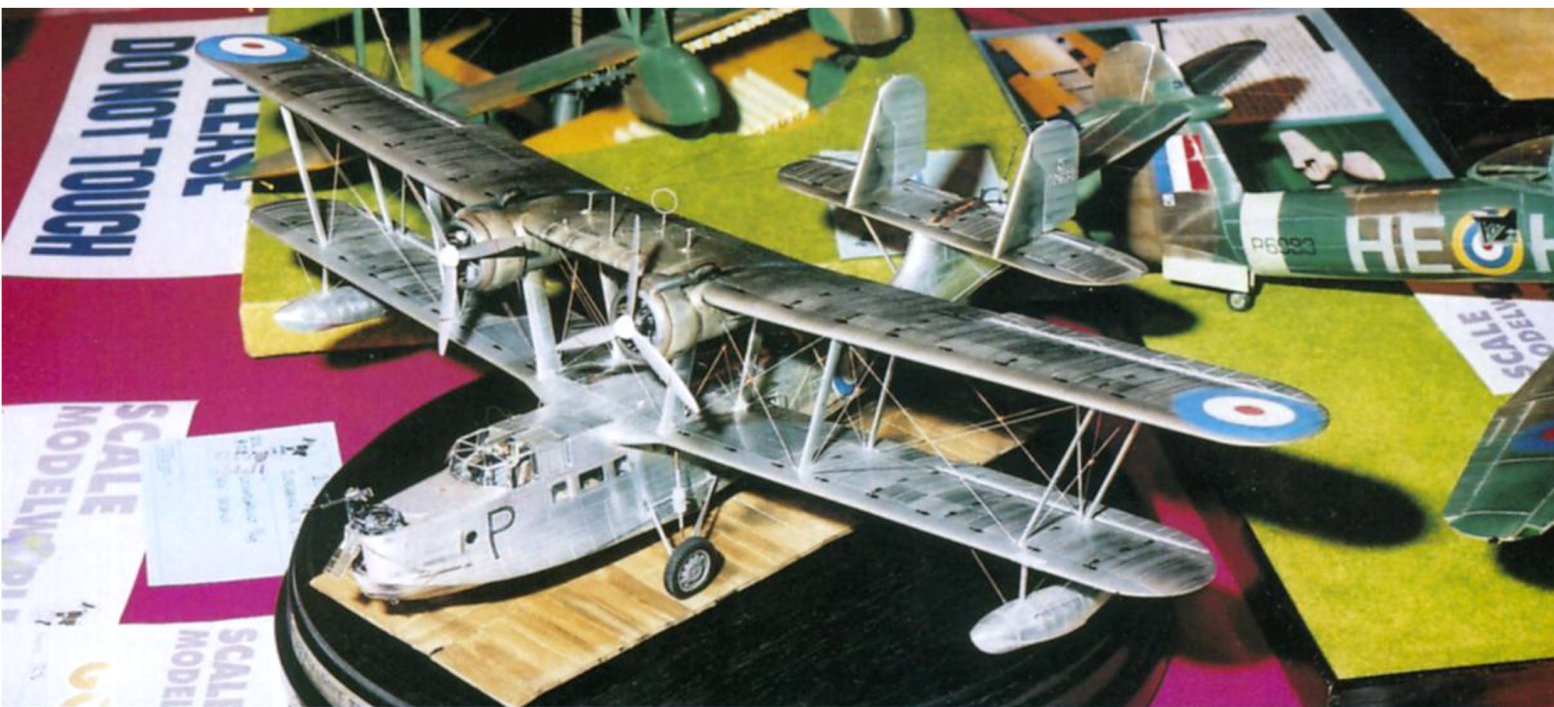
Apologies for my nit-picking, it's still a grand model!

Stuart D Compton

Staffordshire

this a possible source of confusion? (*Squadron/Signal* p.37.)

4. The spinners of Red J (*Werkenummer* 0364) were supposedly



● Supermarine Stranraer
by M Tsanos, Gold Class 20, was judged Senior Best in Show and winner of the Jim Howard Trophy

Telford 2005

All photos by Mike Jerram

IPMS Scale Modelworld

Once again, Telford was a magnet for scale modellers, traders and distributors from all over the world - all eager to display, buy or sell all that's latest and best. All the usual suspects were present at Telford this year - including Airfix with the revelation of several hitherto unannounced and exciting new kits - see News in this issue for details



● Handley Page Monoplane
by Vic Cook, Silver Class 10



● Auster Antarctic
by N Poncini, Gold Class 7



● Lockheed U-2A
by J Fosgren, Silver Class 17



● Handley Page Heyford
by Alan Clark, Bronze Class 20



● Curtiss P-40 Tomahawk
by A Polyzos, Gold Class 14



● Sud Est Languedoc
by W Mathews, Gold Class 25



○ Bv 222 V2
by R Ulrich, Winner of the Angela Adams Trophy



● Avro Manchester
by C Krcmar, Gold Class 11



● Dassault Ouragan
by C McKee, Gold Class 13



● Bf 109E-3
by M Waligorski, Gold Class 4



● MiG-21F13
by E Rossa, Gold Class 5



● OV-10D Bronco
by L Kuna, Gold Class 9



● F/A-18D Hornet
by J Wilkes, Gold Class 18



● Vought Corsair II
by P Cherriman, Gold Class 12



SAM Publications staff on our new stand welcomed many faces, new and old

SAM Publications author Lynn Ritger's talk on the early Bf 109 was well attended. Lynn is seen here signing copies of the new Modellers Datafile 9 – which is now available



Ju 88A-4
by M Bogarelli, Gold Class 15



Spitfire Mk 22
by J Senft, Silver Class 14



Bf 109E-1
by Lynn Ritger, Gold Class 17



F-105D Thunderchief
by J Pfister, Gold Class 16



F-117A Nighthawk
by J Svoboda, Gold Class 1



Piasecki HUP-2
by M Wuellner, Bronze Class 24



● D.H. Venom Mk 4
by Poncini, Gold Class 10



● Sea King
by V Siedl, Gold Class 24



● Fokker FVIIA/3m
by R Ulrich, Silver Class 9



● Ju 88
by M Papadamas, Silver Class 15



● Lockheed Hudson
by P DiCora, Silver Class 20



● Convair CV-440
by J Fosgren, Silver Class 25



● LET LF-107 Lunak
by L Kuna, Gold Class 22



● C.F. Ritchel Airship 1878
by M Skarytka, Winner Mushroom Models Trophy



● Ansaldo S.V.
by M Vanous, Winner of Cross & Cockade Trophy

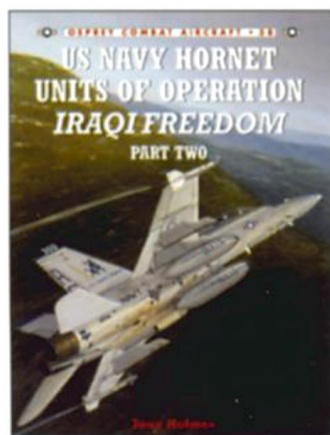


● Westland Whirlwind
by Alan Clark, Commended Class 20, and Winner of Ron Rowley Trophy

Вернуться к оглавлению

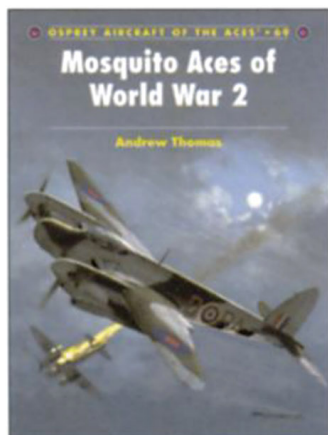
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Combat Aircraft 58



I 84176 878 2

Aircraft of the Aces 69



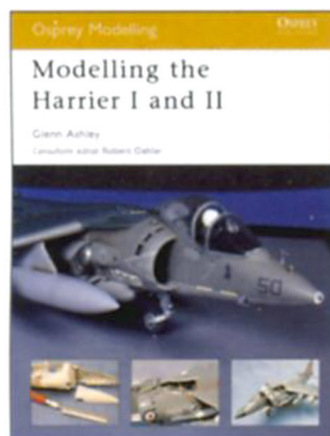
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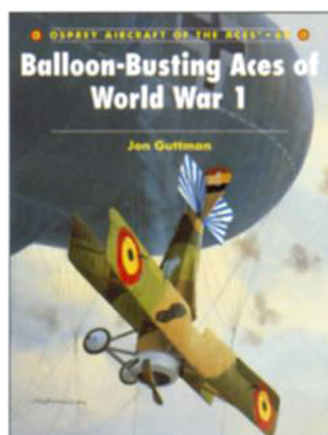
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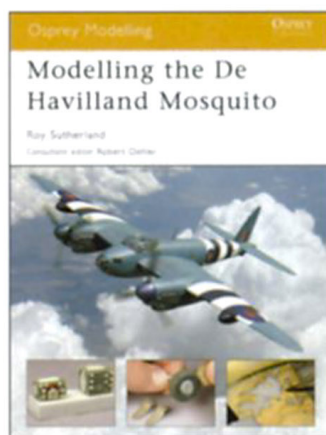
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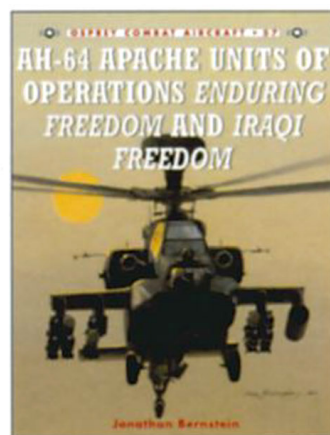
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Aircraft of the Aces 66



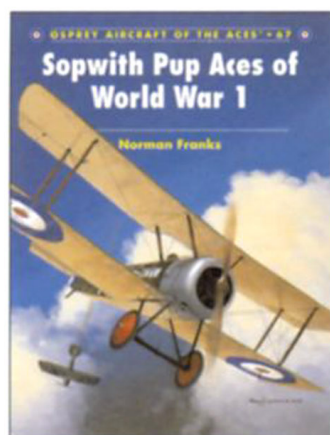
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Osprey Modelling 7



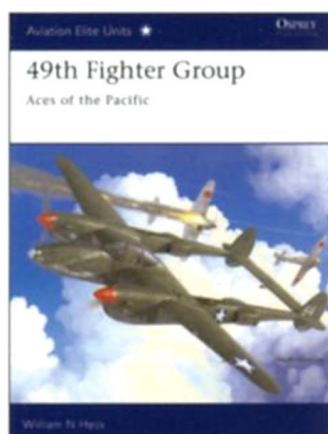
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Combat Aircraft 57



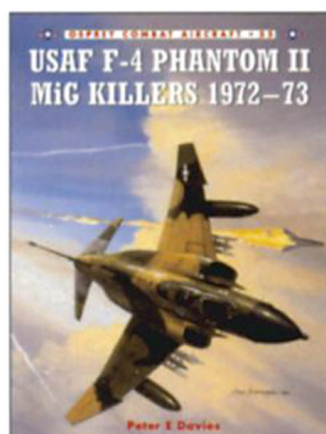
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Aircraft of the Aces 67



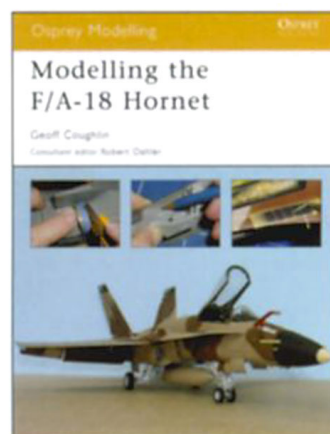
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Combat Aircraft 55



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Osprey Modelling 16

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